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Lectures
upon
the Practice
of
Physick
by
W.^m. Cullen M.D.

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Class II
Neuroses.

Neuroses.

The name I have given this class is perfectly new, and as such an Innovation was requisite for the due expression of its several objects, I conceive it may be sufficiently allowable.

It comprehends those diseases that are purely nervous & those only. The character of the class is "*Sensus et Motus laesi*." If this however was the whole character its extent would be indefinite, and it would comprehend every disease to which the Animal System is subject, since every corporeal affection must depend on some alteration of the Sense and Motions of the System. I have therefore annexed a limitation to it, viz, "*sine morbo locali*," or "*sine vitio organico*;" by which I exclude the several organic affections of Sense and Motion, and confine the present consideration to those of the *Sensorium commune*. For sense & motion depend on the Nervous power, to which certain organs are appropriated, for the better and more extensive communication of these; hence Interruptions may occur

occur in each, and sometimes depend on the Nervous power itself, at other times they are purely organic.

I have however still further confined the term by limiting it to those "*sine Pyrexia*"; for here no irregular motions are exerted in the Hydraulic System, and hence this class is exclusive of the Pyrexia which are indeed Nervous affections, but by no means purely so.

It was hardly sufficient to say "*sine Pyrexia*" simply, but "*sine pyrexia Idiopathica*" was necessary to be added. For Apoplexy may be attended with fever; this however is accidental, and whenever it occurs is always Symptomatic. The Idiopathic therefore was only to be excluded.

The Division of the class is,

- I. When the disease consists in a weakness or imperfection in the exercise of the functions.
- II. Irregularity in the exercise of them.

Under the first head I comprehend the orders Comata and Adynamia; under the second Spasmi & Vesania.

The first head I have again distinguished into

a. As affecting the voluntary functions.

Under this head I comprehend Comata.

b. As affecting the vital & natural functions.

To this I have confined Adynamia.

The second head I have subdivided into

a. As the irregularity is in the functions of motion.

To this I prefer Spasmi.

b. As the irregularity is in the functions of Sense.

Under this I comprehend Vesania. —

In the whole of these characters I use the terms "chiefly affected"; thus in the Comata I confine them to the voluntary functions, in which I say they are "chiefly" affected; though the others are in some degree affected: So with regard to the functions of Sense and motion.

It has been proposed to limit Nervous diseases to affections of the Alimentary canal, or disorders of other parts depending on this, and therefore limit Nervous disorders to Hysteria and Hypochondriasis; but the difficulty of separating this from several others is evident. — Dr Whist proposed the prosecution of this plan.

Order I.

Comata.

Comata.

I have distinguished this from the other three disorders. These ^{also} ~~are~~ are distinguished by the different functions they affect, but the Comata are chiefly a cessation or interruption of voluntary motion. I have added in the character "cum sopore", and this I explain as a state nearly the same with that of natural sleep. I did this in opposition to the new meaning Linnaeus has given to the term *Sopor*, as he has extended its application to the cessation or interruption of sense and motion, in any particular part. Thus in his 10th Genus "Paralysis" he has characterized it "*Sopor constantis partis alicujus*", but this is too loose, and I therefore keep to the more ordinary meaning of Sleep, which I say is that affection of the sensorium in which most of the motions cease from their exercise, or that state in which sense and voluntary motion cease, but the action of the vital functions continues, and the going on of these is as necessary to constitute sleep as the cessation of the former.

The

The Genera of this Order are referred to two heads,

I. Consisting of Apoplexy & Palsy.

II. Of Cataplexy.

In the two first the muscles are without action, and constantly in a state of relaxation, arising perhaps from the undue balance of the antagonist muscles, where Nature has given a greater degree of contractility to the Flexors than the Extensors. But in Cataplexy ~~in~~ the reverse takes place; the muscles are in a contracted state, in the situation they had been placed by the power of the Will; or independent of the Will, if the member has been contracted by external force; the contracted state remains, and does not alternate with relaxation.

Apoplexia

Apoplexia.

The Apoplexy is distinguished from the Palsy chiefly from the universality of the affection. Palsy is always a partial affection, and if attended with Lopor, or a relaxation of the whole muscles it is considered as Apoplexy. The attending Lopor too may be a distinction between the two Genera; for in the Apoplexy this Symptom is always present, but may be absent in the Palsy. Therefore I've said in the character of Paralysis "as if from Lopor".

Respecting the Lopor great varieties may occur, and between the natural Sleep and the profound state of it that occurs in Apoplexy there are no precise limits. They differ in the causes exciting them, for in the natural Sleep the slightest stimulus may produce an Excitement, whereas often in the Apoplectic state no power is sufficient for the purpose. There is a great difference however in the excitability of different persons; some are awake with the greatest facility, others again with the utmost difficulty; on what this diversity depends is difficult to determine; it must depend on the different excitability, and on the degree of duration; but this however will not allow us to form even Species and much less new Genera of diseases; errors
into

Apoplexia.

10.

into which Sympomatics have fallen.

As then being promised, I proceed to enquire into the proximate cause of Apoplexy, and in this investigation I shall touch on some of the principal points of the history of the disease.

Proximate Cause.

I presume it is admitted as a fact in Physiology that there is a Nervous Power, that is a power extended over the Nervous System, wherever the Medullary substance of the Brain & Nerves reaches, a power that admits of free communication between its several parts, and this with its mobility and the foundations of all its phenomena. This power is the fundamental part of the Animal System, preexistent to every other function, and the means of their existence, being a necessary power operating on their parts, in order to their formation; hence it is independent of the other functions, but though originally in this state, yet as the body is formed it gradually acquires a connection with the other functions that renders it dependent on them, and is influenced by their different states & conditions.

Our subject then of the Interruption of Sense and Motion we refer to three heads.

1. That

Apoplexia.

9.

1.st Those set of causes directly affecting the Nervous Power, that operate directly upon it, and produce changes immediately upon its substance. Such as Poisons.

2.^d Interruption of Sense & Motion may be imputed to causes affecting the Organs of the Nervous power, as the substance & condition of the Medullary substance to which it adheres, and which preserves its free communication.

3.^d Set of causes may be referred to such causes as destroy the other functions that are necessary to the durable support of the Nervous Power and its exercise).

I am here led to take notice of an error in the Synopsis. In the definition of Apoplexy it was not sufficient to say "*Motus voluntarii immixtuli*", because the affection is not merely confined to the voluntary motions, but also extends to the vital. We should have accepted the case of Syncope, and have said, with Boerhaave, "*supersit motu cordis, & respiracionis pulmonum.*"

With respect to the causes we have laid down, Apoplexy seems chiefly referable to the two first kinds.

As to the Organs of the Nervous Power we understand but little of their structure, we know that any external compression on the Medullary substance of

a Nerve will interrupt that communication of motion on which the whole of its functions depend, and in a fatal apoplexy few instances occur in which some kind of compression does not take place. As this, therefore, is the most frequent and considerable cause of apoplexy, we may, with propriety, enquire into the

Causes and Effects of Compression

The cases of Compression may be referred to four heads.

1. Those arising from immediate, perceptible external violence, thereby compressing the Cranium and the Substance of the Brain.

2. Those arising from certain Tumours, formed within the cavity of the Cranium, and often arising to such a size as gives considerable compression. With respect to the diversity of such Tumours I can communicate little, nor have practical writers ascertained their various nature, and far less their particular causes. The subject is involved in obscurity, as external symptoms by no means lead to a discovery of the nature or existence of these Tumours, nor do they admit of a remedy.

3. Case arises from an over distension of the vessels of the Brain, the fluids being still confined in their

Aphasia.

11.

their proper effects. This case undoubtedly occurs, and the proofs may be deduced from the symptoms of congestion observable in a person, sleeping to the ground; for in this situation the external jugulars appear turgid and the veins of the face show every mark of distension. In recovering the erect posture the patient is affected with dizziness, vertigo and the common prelude to apoplexy itself. For apoplexy is generally preceded by such symptoms, and chiefly occurs in such persons as are evidently Plethoric, and is frequently induced by mechanical causes accumulating the blood in the vessels of the head.

I once saw a person who from a Neutoma or Tumour in the Abdomen, obstructing the passage of the blood thro' the descending Aorta, and of consequence rendering the return of venous blood more difficult from the head. This man I saw was affected with Apoplexy upon sleeping, and a degree of the apoplectic Stasis was brought on. But many cases of Aphasia occur in which it is very transitory, where the patient quickly recovers, and in such cases we can by no means suspect effusion but must refer it to simple distension. — There)

Apropteria.

12.

There are some difficulties attending this doctrine! We are apt to consider the distension as occurring only in the larger vessels, but it is difficult to conceive how these can be so distended as to affect the origin of the Nerves. Supposed the extremities of the vessels are every where contiguous to the origin of the Nerves, and if we suppose a decreasing series of vessels or a continuation of them into Nerves, it must be evident such will be contiguous to the origin of the Nerves. Tho' I allow that Nutrition is not performed by the Arteries, yet I believe the Nerves must be every where supplied with certain arteries, and hence we may see how general the distension may become in the extremities of the Arterial vessels without proceeding to effusion.

A. Use of Compression may be referred to the effusion of the fluids within the Cranium, and if this is in the intermediate parts of the Medullary substance, we can readily understand its effects. These Effusions are of two kinds,

A. Sanguineous.

B. Serous.

A. Red Blood. The rupture of Red vessels may be owing to,

1. Re-

Apoplexia.

13.

1. External Violence.

2. Increased Impetus of the Arterial Blood arising from causes acting directly on the arteries themselves, such as Anger, Exercise, Chronicity &c.

3. Any resistance to the return of the Venous Blood towards the heart, which causes accumulation & serous effusions. This may operate in two ways.

a. By occasioning a congestion in the veins that are deprived of valves, & hence rupturing their extremities. This occurs in violent efforts and strainings which are often attended with effusions. But it more frequently arises from

b. The accumulation in the veins occasioning the Hemorrhagic effort in the Arteries, in a manner analogous to what we before explained in the Hemorrhoids. Where the Venous blood proves a resistance to the Arteries and excites the Hemorrhagic effort, from whence rupture may arise.

B. Serous Effusions. These may arise from the resistance to the Venous Blood, whence the exhalants pour out their serous contents more copiously. For when there is a resistance in the veins, the Impetus of the Blood must be directed to the exhalants which arise from every artery of the body, and if the exhalants

Rents easily gives way, they admit the serous effusions and become considerably lax.

1st The resistance of the Venous blood prevents the absorption of the serous fluids in the body, as it will especially have this effect in the brain, and such Exhalation will be more readily accumulated here, as we yet take it as an Anatomical fact that there are no lymphatics in the brain - an exhalation however we are certain of, and as absorption must be always consequent, upon this, we suppose this office must be performed by the extremities of the veins, and therefore the Hydroptic effusions must be here particularly accumulated, as the Veins, whose office is to absorb such extravasated fluids, are, from the distension, incapacitated of the function.

2^d Case of Serous Effusions - when they do not so much proceed from the resistance of the Venous Blood as from the laxity of the Exhalants. Such is the case of these Anasarcaous effusions, that so frequently follow Intermittents, and often without any suspicion of venous obstruction, and we know this to happen in the brain because effusions happen there when they are general in the System.

3^d Case, when they do not arise from either of the two
causes

causes but from an abundance of Serous fluids in the Blood vessels. Thus we explain the Dropsy attending Chlorosis, and it happens in some other Læthæmie where the Blood is not duly prepared, and the mass is so fluid that the fluids run off thro' every ac-
balant.

A.th A particular effusion is that arising from an Ichuria renalis, where the quantity that should pass off by the Kidnies is accumulated in the veins, and hence the fluids have been observed to run off, at every outlet, and a Deposition is made into different cavities & frequently in the Brain.

These then are the general causes, & you will observe that resistance to the passage of the Venous Blood is the chief cause of the several species of effusion. It will be necessary however to trace this a little further.

I formerly explained how Venous pectora is formed in the decline of life, & subsists at that period when Apoplexy most commonly occurs. I have observed how liable this was to be excessive in the System of the Vena portarum, and shall proceed to mention its effects in the brain.

The return of the Venous blood in the brain is
different

different from that of other parts. The construction of the Venous System is here peculiar; instead of a series of vessels gradually increasing or of small veins uniting into larger branches and these again into trunks, there are certain Sinuses, so constructed, that the smaller veins of the Brain empty themselves directly into them. These vessels are inserted into the Sinuses in an unfavourable manner, in a direction contrary to the course of the blood. In passing thro' a Sinus they are turned more or less anteriorly, before entering, and form always more or less of serpentine windings in the Lamellæ of the Dura Mater. Thus the motion in the Longitudinal Sinus is towards the Front; the veins on the contrary open towards the Occiput, so that they make a kind of retrograde motion to the Sinus.

The Venous Blood in this part has not the same assistance to motion that it has in other parts; it is deprived of valves, and the action of muscles, and, being destitute of these, a retardation is more likely to occur.

An Accumulation then is especially liable to happen in the Brain, and particularly in the decline of life, as the Blood is then deprived of the only powers

powers that move it, the action of the heart & arteries, and at that time the Venous Stagnation takes place.

This accumulation in the veins of the head is, more liable to occur in persons that have larger heads & short necks, whose venous system is larger with respect to the rest of the body. Persons who have died of Apoplexy have been found, it is said, with only 6 cervical vertebrae.

Other causes may occur, as any particular determination to the head, as suppressed Hemorrhoids and Compression of the descending Aorta, as occurs in pregnancy, Dropsy, &c; also any obstruction in the right Ventricle of the heart; Polypi, for instance, may produce Apoplexy, but as these are often made quasi articulo mortis they should rather be esteemed effects than causes of the disease. Independent of Polypi there are other causes of resistance; whatever resists the passage of the Blood thro' the Lungs must operate on the right Ventricle of the heart, & any obstruction in this Ventricle has considerable effect on the vessels of the head.

To show the effect of resistance to the right Ventricle of the heart we must consider the motion of the

The Brain, which on experiment, with the Cranium removed, has been found to have an alternate motion which is not Synchronous with the pulsations of the heart, but with Aspiration. It rises in expiration from the resistance to the right ventricle, and in Inspiration it subsides.

Hitherto can now scarcely explain the various resistances thro' the Lungs than the accumulation in the veins of the head, which accumulating in their extremities will compress the origin of the Nerves & produce Apoplexy. Hence Apoplexy must be frequently owing to venous congestion in the head. This Venous Plethora may operate two ways in producing hemorrhagy, whether by Rupture or Anastomosis, by occasioning the Hemorrhagic effort which increases the action of the Arteries and urges on the blood towards their extremities. Sometimes this does not appear in the vessels of the Brain itself, but from the laxity of the vessels of the Nose the Effusion is there often produced. Hemorrhages at the nose in persons after 50 years of age is almost universally a prelude to Palsy or Apoplexy.

The Venous Congestion operates in this manner, but more slowly, so that by the gradual dilatation of the

The exhalata it operates chiefly on these. These two causes may explain the sanguineous and serous Apoplexy, they both arise from the same cause of venous congestion, but it is seldom we can distinguish them by the symptoms of Plethora attending each, or by the Method of cure.

We see then from an increase of Venous Plethora, or a flux in the arteries, a congestion may be formed in the extreme vessels, producing a constriction which we call an Hemorrhagic effort. This may rupture the vessels or only give dilatation so as to produce a serous effusion. This is the idea I would take of Apoplexy as an Hemorrhagia Cerebri with Hoffman, but grounded on a Venous Plethora.

The Apoplexy from Effusion may be reduced to two. The Apoplexia Hemorrhagica, and Apoplexia Hydropica. The former comprehends the two causes just mentioned; the latter I take to be that state of Effusion depending on a laxity of the exhalants, rather than a resistance in the Venous system. The last is a common affection of the whole System, & a consequence of a general Cachexia, and the former only is an Idiopathic disease.

We are now to enquire how far Apoplexy may arise

arise from causes operating immediately on the Nervous power, independent of compression. This is difficult to determine, but it appears that ordinary sleep happens merely, from the state of the Nervous power without compression. A person shall fall asleep merely, on the removal of usual stimuli, and the explanation of this requires the supposition of the Nervous System, and seems to depend on its alternate states of Excitement and Collapse. We can conceive this Collapse to occur, if sleep should be excessive, and proceed to a marked degree, which we see evidently, from external causes, as poisons, Cold, Electricity, &c.

I suspect that Apoplexy, may arise from internal causes, and that such do occur I conclude from the cases of Epilepsy & Hysteria which are succeeded by Apoplexy, and this it is obvious cannot depend on compression, for the suddenness of the affection will not admit of the supposition: we must therefore attempt its investigation in some of the other causes producing the Apoplectic Collapse.

Another circumstance against the notion of compression arises from Apoplexy and Palsy being induced by the Atomic Gout, in which there is no room for compressing

suspecting compression, and we can only refer it to a state of Thoria in the System according to the Sencarium communis.

There is one particular case of Collapse that deserves our attention. There are many cases of Aphasia & Palsy which, when examined by dissection, show no marks of compression; sometimes indeed we find small tumours which alone can excite the least suspicion of compression; but these tumours or slight local affections are too inconsiderable to operate in this way; they extend only over a small part, & can never be supposed to touch any part that may be hypothetically deemed the Sencarium or common origin, as has been conceived of the Corpus Callosum &c. - On the contrary there are few cases of compression sufficiently considerable to affect the origin of all the Nerves; and besides, there is no foundation for supposing sensation to be confined to a small space, or that the Nerve of the heart in particular should be derived from so small a source that the whole might be easily compressed. We therefore conceive this cause to be insufficient to produce an entire cessation of voluntary motion; the compression appears to be only partial, and such as can induce

a regurgitation to the extreme vessels, and thus, indirectly, produce a general collapse. Other considerations will lead us to the same suspicions; but as these will be further elucidated when we treat of Paralysis, I shall proceed to the

Cure.

The Apoplexy is a fatal disease and seldom to be cured by Art: Our Indications turn rather on the Prophylactic than Curative method, & the former is most easily affected. We mentioned some causes of Apoplexy, and if we are right in assigning the most frequent, viz. Venous Plethora & Congestion in the head, we surely may obviate this by the methods we take to remove other plethoras of the System. These are by Spare Diet, Bleeding, Exercise, &c. and these are the principal circumstances to be attended to.

Apoplexy commonly occurs in persons of vigorous & robust constitutions, and for these to subdue their apoplexies is in general no easy task. I have frequently formed a distant prognosis with respect to such persons in whom it was most likely to occur, who afterwards were seized with the disease.

When the disease is present it may be a question what is the actual rationale of it; as arising from
Compression

compression or collapse?

Of the first we have two kinds, the Hemorrhagic and Hydropic; but between these an intermediate case is to be marked, viz, when there has been no hydropic state of the system, no general tendency to lachexia, but only a venous congestion sufficient to excite the Hemorrhagic effort and urge on the arterial blood to the capitant vessels, and hence occasion effusions in the Brain.

As to the cure of the two extremes we can easily determine it; but the practice in the intermediate state is more difficult and nice. With respect to the Hemorrhagic the cure must turn on the depletion of the venous system of the head; and this is to be done by bleeding and every other part of the Antiphlogistic Regimen; particularly however by bleeding are the fatal consequences to be ~~avoided~~ avoided.

From a view of the uncertainty of the case, and from its being sometimes a serious Hydropic effusion, Physicians have been cautious of Bloodletting; and a late Author particularly advises us never to exceed eight ounces; but this is certainly too little, & we have variety of instances of Apoplexies being bled to the quantity of several pounds.

Arteriotomy

Arteriotomy has been proposed, and much has been said in commendation of it.

My objections to Arteriotomy are principally from their not giving so sudden a depletion, & reabsorption in consequence; and bleeding in the Jugulars on both those accounts is to be preferred. I avoid Arteriotomy because it precludes another remedy, viz. Blisters. When an artery is opened in the temple and tight bandages are necessary, Blisters can never be properly admitted.

If we are satisfied ^tthe Aphasia is of the Hemorrhagic kind, Bleeding is especially necessary, and every thing stimulating is to be avoided. Physicians have commonly joined both the Evacuants & Stimulants together, but I agree with Morgagni who conceives the Hemorrhagic to be by much the most frequent case, and hence Stimulants should be avoided provided Blisters is not excluded. The Stimulus of Blisters is different from other Stimulants, and their Stimulus is transitory, and sufficiently compensated by the relaxation they induce. They are more considerable in their topical than general effects, and are the most effectual in removing Inflammatory Effluvia — hence their use here.

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The only other Remedy to determine from the head is the powerful revulsion by Purgatives, and here the direct Purgatives are to be used. For in Apoplexy where Irritability & Sensibility are so far lost of the dominancy of Purgatives is not so easily propagated, and at any rate the relaxation they produce abates their stimulating effects or any irritation. We must repeat them frequently. A late writer advises Tartar Emetic and Antimonial wine, with great propriety.

This finishes the Cure of Hemorrhagic Apoplexy, and, except Blesters & Purgatives, we should abstain from every Stimulus. The Author I speak of treats the disease as Hemorrhagic entirely, and hence advises a compression of the Veins by Bandages; but the remedy is precarious.

The other Species of Apoplexy by Compression is the *Hydropic*.

From the relaxation so generally induced in this case, Bleeding, as diminishing the tone of the Vessels, must be improper. Bleisters here also may be improper and trifling as an evacuation.

Purging is our principal remedy and equal in its effects here as in other Hydropic cases. But Stimulants here can be of little service. Direct

Stimuli

Stimuli that do not produce absorption are useless; for their effects cannot be rendered sudden over the system to restore the tone of the parts; hence in any cases of apoplexy from compression we cannot have recourse to Stimulants, tho' the system being so relaxed naturally leads us to their use. I must allow however in several instances Stimulants are of service, but it is in other Apoplexy's than what we have mentioned, viz. in the Apoplexy from Collapse. What are the cases purely depending on this I am at a loss to say.

Paralysis
3
3

Paralysis.

In a former scheme I put the Palsy under the Adynamia; but now, for evident reasons, I have separated the Paralytica & Adynamia as they affect the several functions, the former as affecting the voluntary, the latter the vital & natural functions.

I have joined the Paralysis in the same order with the Aphlexia, for there is a considerable affinity between them.

I have defined Palsy by a partial loss of voluntary motion:— If a tendon is cut thro' and the member is lost to the influence of the will, it continues to be esteemed a Paralytic case.

Palsy, by nosologists, has been distinguished into different genera, as Hemiplegia, Paraplegia &c; but these only differ in degree, and at any rate can give but species, by no means genera. I have comprised the whole under one genus, Paralysis, and in this I agree with Hoffman, Boerhaave &c. I distinguish it from Aphlexia by the partial & general affection; but the limits between the diseases are difficultly assigned. The Palsy much resembles the Aphlexia and has frequently the same

attending on it; but as the affection is partial this prevents our confounding them.

I omit the loss of sense, as this is by no means essential to the disease. It is merely a loss of motion, and the cases of loss of sense occur. If there is a case of loss of sense without loss of motion I would consider the disease to be different.

A gentleman was affected with a loss of motion on one side, particularly his upper extremities; his sense was exquisite in the affected arm, and the pulse was in the usual condition. He had afterwards an affection of the other arm in which he lost the sense, and in this arm an extreme coldness was always perceptible.

Nature has affixed a net work of Arteries with the sentient extremities to give exquisite sensibility.

I do not remember a case of loss of sense where loss of circulation did not in some degree accompany it.

On this subject I might mention a difficulty; in referring Palsy to compression we say why this compression should only affect one half of the Nerves of sense and not the other, since the source seems to be the same.

Dr.

In the palsy less force of the Nerves is necessary to sense than motion, and therefore the former may subsist while the latter is abolished, as one Hemisphere of the Brain is entire and gives motion for the sake of Sense which it does not for motion.

Under the term Paralysis I do not mean to comprehend every degree of loss of motion; for, between the first degree of debility and the evolution of Lethargy to the absolute loss of motion, there are many intermediate degrees, perhaps they have a common cause, and for the true distinction of diseases it is necessary to refer Palsy to a loss of motion. This might be referred to one Genus, Atonia, but I found it so difficult to find a generic character for it that I left it out—among the Synonyms I have not seen the Atonia of Linnaeus, who has referred it to the Muscular fibres, but I consider it as an absolute loss of motion. The two other Synonyms, the Tremor & Shivering, I have inserted because they more certainly belong to Palsy than to the head of Spasms, to which the other Systematics have referred them.

Causes of Paralysis.

These are to be referred—1. To Compression.—2. To Collapse.

So far as it depends on the first the Theory is the same with Apoplexy, and the cases of Compression we mentioned there will apply here.

So far as Palsy is confined to a particular time of life it is the same with Apoplexy, and it occurs in the same Temperaments and with the Symptoms of Venous Plethora in the head; and the affinity of the two diseases is ^{more} completely established by the Hemiplegia beginning with an Apoplectic fit, and when it proves fatal it is always with a return of the same Apoplectic fit; hence then all the cases of Compression apply here.

As to the case of Palsy from Effluvia we are at a loss to assign particular cases; but all his Arguments I employed as to the existence of Palsies in Apoplexy apply to Palsy, but it is rather more distinct in Palsy than in Apoplexy. Palsy arises often from the fumes of putrid, from Malignant air, &c; and in these and in such cases we can not suspect Compression. In many cases from the nature of the causes this is evident; but when these causes are not evident, it is difficult to explain what are the internal causes operating.

When Palsy is brought on by Apoplexy there is little

little doubt of compression taking place; but the great difficulty arising is that Palsy is often found to subsist for many years, and it is not easy to imagine the compression which originally produced the disease to subsist so long, and especially when it compresses one half of the Brain only, as the vessels of the brain so readily communicate with one another.

The case of Effusion is likewise attended with the same difficulties. In all such cases therefore when the disease originally began from compression and has continued a long time, we have reason to believe that such compression induces collapse and that it is only by collapse subsisting that the disease continues.

We should endeavour to know when the causes of compression and when the causes of collapse more frequently take place. As the cure of Palsy must turn on our determining this question, I shall endeavour its explanation.

When Palsy comes on without symptoms of general and partial Plethora, we may conclude in favour of collapse. I have put the cause of Apoplexy and Palsy in a venous plethora, but I now say the

the Plethora may be arterial as well as venous; thus in young people in whom the Hemorrhagia Nervium occurs, if this Hemorrhage does not succeed, the Hemorrhage is turned upon the Brain. In diseased cases of Apoplexy occurring to young persons when you find many effusions of blood never seen in the brain. We must therefore be cautious of concluding only in favour of the Venal Plethora.

When the Arterial Plethora has ceased, viz, at 35 years of age, and the Venous has not yet considerably formed, as before 50; if at this time there are no marks of partial Plethora, no symptoms of Austerity, no Hemorrhagic flux &c; when cases of this kind occur they exclude Compression, but are strong in favour of Coliculus.

I before mentioned Tumours in the head, and such Tumours do often exist in an obscure way, and may produce considerable effects. Their producing effects however without previous notice is rare, and such Tumours discover themselves by the previous symptoms of Headach, Mania, Epilepsy, &c; by one these we may suspect topical affection of the Brain. When we observe these we generally observe marks of accruing Surgeance. When this occurs it gives pretty sure marks of its arising from such tumours with Surgeance; thence from Compression. All

all these states expressing the absence of Compression are not complete unless we observe no preceding symptoms of Dropsy, Ischuria &c; when no symptoms of plethoric state occur that may provide for effusions, when these do not occur we may suspect a cause of collapse.

I add further that the plethoric symptoms & the evidence of compression has occurred in the beginning, yet when a crisis has long subsided without variation of symptoms, but with Turgescence, congestion, &c; then I would conclude the cause of the disease was changed into a cause of collapse, whatever might have been the primary cause thereof.

I have hinted that it is difficult to suppose tension confined to one side of the Brain. The Hydraulic System is extremely variable in its fulness, degree of Impetus, and particular determination. But: Helzer, de Morbis capitis: He there gives a case of Palsy ~~varying~~ varying every day, it was a case of congestion, and accompanied with various determinations to different parts of the Brain and System in general.

If we suppose it depends on Serious Effusions, this we can suppose more steady and partial, but to 20
or

or 30 years duration I cannot conceive it; there are few instances where Acromony does not arise from long stagnation, and it is particularly improbable that such an obssion should neither increase nor diminish, and give no variation of symptoms. It is improbable the exhalation & absorption should be so precisely balanced that neither of them are increased.

The case of durable Pulsy therefore originally depends on compression, but if they remain long without change I would presume a state of collapse to have taken place. A state of collapse however may be liable to some variation, but these we cannot so well explain as the changes in the circulating system. We have many invariable cases, and therefore I would say a durable Pulsy suffers little change when it depends on a state of collapse.

There is one case where we may be dubious in referring it to collapse; a case that first arose from compression. Where the compression had considerable effects on the Sensorium and affected the Intellectual faculties, as long as Oblivion &c. subsist, we cannot be certain that the original cause, viz, compression, is removed; but when these are removed & people

recover

recover part of their faculties, then I would conclude the compression was taken off and merely its effect, the Collapse, properly subsists.

Respecting the ambiguous cases, I allude, when Palsy follows an Apoplectic fit, the presumption is in favour of compression; but the conclusion is not absolute, as I rendered it probable that there were cases of Apoplexy from Collapse, so there may be cases of Palsy from the beginning arising from Collapse.

Dimmerbroock tells us of a young girl, who, from sudden fear, was affected with Paraplegia from her head downward; this became more limited and was confined to the lower extremities, which subsisted for 30 years, and by a sudden flash of lightning she was suddenly cured of the Palsy. Here it would be hard to suppose the fear could suddenly remove the congestion or Effusion, and there is little doubt of this being from a state of Collapse.

In the Practice of Palsy therefore the determining this question is of the utmost importance. — I now proceed to the

Cure.

When we know Palsy has succeeded Apoplexy, and that

that of the Hemorrhagic kind, the cure must be the same with Apoplexy, by Bleeding, blistering, and Purgings. With regard to Palsy however this is confined to a small space of time, only in the beginning of the disease; for when the Palsy is formed into its proper shape, the Hemiplegia, then one of two things is to be presumed;

1.st That either if it depends on compression or effusion, these continuing it is still of the same kind; or

2.^d That it becomes a case of Collapse. If it is an effusion we must presume it to be a serous effusion, as a sanguineous cannot subsist with life for any time. In that case Bleeding is not necessary to take off the (Morbid) state, which by the effusion is in some measure removed, and it (viz. Bleeding) may increase it as it diminishes the tone of the System and relaxes the vessels. — Purgings, blistering, & Issues must be the Medicines in the present cases. — External Stimuli are not very dangerous, but they can be of little service, only as far as they are circumstances, thence internal Stimuli may be useful.

The Stimuli in a Collapse might be useful yet they are dangerous. As we suppose the Collapse a relief of Compression we may suppose the Compression (able) to

to return, and Stimulants are to be avoided as they may occasion the return of the Plethoric state and hence the Compression. The only safe Stimulus is Exercise, and particularly Gistation, and Friction is particularly useful; suppose the General Plethora and partial are removed, and the Collapse subsists, then obviating their return is our chief Indication. — Considering it then as pure Collapse Stimulants are the only remedies.

There are few Internal Remedies that are Stimulants to the System in general that can be safely employed. The Potassic Alkali is a powerful Stimulus, I have employed it in large doses, and have seen its effects, but they are very precarious, and its Stimulus is extremely transitory. As it is Alkaline it must be soon neutralized in the Stomach. It may indeed be of some service in a recent state of Collapse, but in a lasting state it is ineffectual, as it cannot be condensed so long as is requisite, and the effects of all our Stimuli are gradual and slow, and if pushed to a considerable degree they are liable to produce Inflammatory affections in the Stomach and by the constant use of Alkalies by destroying the Acid in the Stomach they may favour the Septic tendency of the blood to a very great degree.

The

The Aromatics are less powerful, less suddenly diffused over the system; liable to produce topical Inflammatory affections more than to produce general Stimuli.

Bitters and Tonics are of little service, and rather liable to do harm. These contain somewhat of a Sarcotic quality, that by their long continued use they may destroy the tone of the System.

From Palsy's being confounded with Epilepsy Physicians have had recourse to the various Feltics and Antispasmodics, but from these I have never seen any advantages.

The Acrids taken from the Juice of Plants, the Tetradynamia particularly; these are pretty powerful; but their Stimulus is transitory. They may prove indeed useful (Diuretics, and are useful in all cases of Palsy depending on the Pithoric state). In short & however the Internal Stimuli are very ineffectual; the External are most to be depended on. Of these the different Salino-matters have been extremely useful, as Acids, Alkalies, and Neutrals; and various vegetable and Animal Acrids, as the Volatile Oil and strong Brinc.

Besides these Salino Acrids many vegetables and animal

Animal matters have been employed. With regard to
 oil these they are apt so much to inflame as to inter-
 rupt their use. The Acids & Alkalies we must involve
 in oil, and with this they are very ineffectual, as they
 inflame the part too much so as to prevent their con-
 tinued use.

Of the Vegetable Uroids I find Mustard to be the
 most powerful; not as reduced to powder, but after it
 has acquired some degree of fermentation, as when
 made for use. This will produce a slight Inflammation
 and its action is more general in the System than
 the rest, & much more than Cantharides.

Several external Stimuli of more general application
 are to be mentioned, as hitherto we have mentioned
 only the topical. Certain passions of the mind have
 been found very general and powerful Stimuli, but we
 cannot employ these in any exact method.

The only ones remaining to be spoke of are Heat
 and Electricity.

Heat is a stimulus perpetually necessary to existence;
 and in all cases of Collapse it may be highly useful, &
 hence a warm climate is best for alleviating the effects
 of Palsy. As a substitute for this we use warm bathing,
 and this is especially suited to the cases of Collapse where
 it

it acts entirely by its Stimulus. As it is to be considered merely as Stimulant it is confined to Collapse, and excluded from the cases of Compression and all cases of Congestion: Warm Bathing has a considerable power of rarifying the fluid, and occasioning a considerable Turgescence in the whole Sanguiferous System.

I have seen a case of moderate Palsy, where no strong symptoms of Compression appeared, yet by warm bathing it was changed into an Apoplexy.

Of all the Stimulants Electricity is the most powerful.

This has a power of pervading the whole Nervous System, and directly applied to the Sensorium it is productive of sudden Death. It has been often employed with various success, sometimes without effect but perhaps then the causes of Collapse were innumerable, or it was not applied in a due degree.

Respecting the manner of its application I cannot give any direction; as the cases of Palsy are dubious between Compression and Collapse, and as they are sometimes mixed, we must be cautious in its application. — The action of Electricity is purely on the Nervous System, and hardly at all, or at least only secondarily

Paralysis

M.

secondarily, upon the Sanguiferous System. If it has proved an Emmagogue it may certainly in some degree act on this last mentioned System. I have indeed seen many instances of its fatal effects, and we must urge its application gradually, and, perhaps in cases of Compression abstain from it altogether. We should avoid directing it to the head, for in Animals who have been killed by an Electrical shock, tho' we find no disease in the Sanguiferous System, yet it may produce Collapse and rotund the blood, and produce accumulation.

Catalepsia

Catalepsis.

This I have never seen, nor do I know any body that has, and I find the history of the disease as given by authors, involved in obscurity. — I believe many cases reported of Catalepsy were feigned cases, for I find authors not precise & accurate in their account of this disease. Many cases of Typhus have been confounded with it.

From these considerations I think it dangerous to offer any Theory on this disease, as we may be reasoning on facts that never took place. — The only thing I could do would be to make some attempts on the Phenomena that seem more likely; but this I cannot enter into with any confidence to myself. I therefore leave this subject entirely to your own Speculations.

Order II.

Udynamia.

Adynamia.

This, in Pagel, is the same with the Debilitates of Sauvages; but, in their classes, they join diseases that have no affinity.

Our Adynamia are distinguished from Paralytica by being affections of Involuntary motion, as the Paralytica are affections of Voluntary motion.

The Adynamia comprehend the entire Defectiveness of Locomotion, the Debilitates of Sauvages, or the Aphasica, i.e., diminished motion in the vital functions. I have extended it to the natural functions.

Syncope
3

Syncope.—

By this I comprehend all Sauvages has given. — He gives four Genera, Asthenia, Leipothymia, Syncope, and Asphyxia. These we reject, for the Asthenia refers chiefly to a debility in the voluntary motions only, and this should have been considered under the former head, under the title of Atonia. —

The three others of Sauvages are only different degrees of the same disease. We can observe these different degrees, but they insensibly pass off from the one to the other; but there is no setting limits to them as different Species, much less Genera.

We must take in the Asphyxia so far as it depends on a suspension of the heart's action. Opium will suspend the heart's action and bring on Death; but it first acts on the voluntary functions, and only from its further operation is the heart affected. — Syncope is a diminution to some degree of Interception of the heart's motion. Syncope is in very generally a Symptomatic affection that we might have passed it over slightly; but it is often Idiopathic which determines us to dwell some what upon it, and the more so because it has not been so well explained by Systematists.

As to its causes, they may be referred to

1. Those acting directly on the heart itself, without operating on the brain.

2. Those acting on the heart, but indirectly, thro' the intervention of the brain.

1st, Or those acting on the Heart.

We know many cases of Syncope have been attended with organic affections of the heart, as tumours, ossifications, abscess &c. — We also find Syncope to depend on affections of the neighbouring parts, as considerable adhesions, collections of water or pus in its vicinity, and we find a cause in the obstruction of blood through the Lungs, Dilatation in the large vessels of the Lungs, and Aneurisms in the Aorta.

The operation of all these must be various and difficult to ascertain.

1st The heart's motion we know may be interrupted by any thing occasioning obstruction of the venous blood, but this can only arise from affections of the Vena Cava itself, and the heart may be perfectly entire.

2^d Any considerable obstruction to the excretion of the heart, as a ligature put on the Aorta, will destroy life, and many diseases in the Lungs & Aorta.

Aorta may operate in the same manner; but this I do not admit to be Syncope, as in this case asphyxiation occurs, and the disease is not of the heart itself, and many organic affections seem to be the cause of asphyxiation not of Syncope. I would confine Syncope to a loss of the heart's muscular power.

It is a Law of the Economy that resistance produces an effort or strong action, and a sense of debility vice versa produces this. If a Ligature is made over the Aorta we find the heart makes stronger efforts, has more convulsive contractions: all these cases interrupting the free evacuation of the heart produce the convulsive efforts we call palpitations. Convulsive efforts commonly end in Palsy or Spasm; the degree of Apoplexy and Palsy attending on Epilepsy is a proof of this. Either of these then may occur in consequence of Palpitation, either of them may produce it, but which is difficult to say. In many cases the Spasm of the heart takes place and produces Syncope and the intermitting pulse, but I imagine the heart in consequence of palpitation more frequently falls into the Paralytic state, and Dissections frequently demonstrate that the ventricles are flaccid. There are indeed cases of Dissection where they were found empty

empty

empty, but the right ventricle is generally full.

In Experiments on living Animals we know when the Right Ventricle has ceased the Auricles nevertheless continue to pulsate.

There are many cases of Syncope depending on the intervention of the Brain; the interruption of the action of the brain must produce a kind of Paralysis, and the case of Syncope. In consequence of the organic affection of the heart convulsive motions are produced which occasion Paralytic effects.

2^d Causes acting on the heart, but indirectly, thro' the intervention of the Brain.

These must act by taking off the energy of the Brain so essential to the action of the Heart. —

A difficulty still remains, viz, why comes it that causes, diminishing the action of the Sensorium, act more on the Animal functions in one case and more on the vital in another.

It is only when the causes act on the vital functions that they can be considered as the cause of Syncope.

We now perceive that certain of these causes act more on the vital than natural functions we should endeavour to find out whether this is owing to peculiarities in their quantity, or whether they are only different in degree.

We must try to resolve this in considering Hemorrhage one of the most noted causes of Syncope. — This may be referred to the first head of causes, but I think it then always produces Death and is never an object of our practice.

It often belongs to the second head of causes, and it is by its taking off the energy of the Brain that it produces Syncope.

Syncope is not solely produced by the evacuation of a quantity of blood, but any sudden afflux of blood to particular parts of the System as to take off the quantity determined to the Brain may produce it. So that in Bleeding Syncope does not happen till the flow of blood is stopped and the ligatures taken off by which means the blood rushes into the veins formerly empty. — Schiærisse upon drawing off the waters in drops a Syncope is often produced, which we endeavour to obviate by continuing the same pressure upon the Abdomen that the waters gave before. It may probably operate by relaxing, but it is more likely to be by taking off the pressure from the vessels of the Abdomen as by that means it causes a greater afflux of blood through them and therefore diminishes that thro' the Brain. (M)

We conclude that the action of the Heart depends on the state of the circulating System in the Brain, which again depends on the Heart and causes the reaction of the blood on itself, and thus Hemorrhage may affect the action of the Heart and induce Syncope.

The same Hemorrhage is likewise often a cause of Epilepsy and Convulsion. — Why do the same causes at one time produce a permanent diminution of the Energy of the Brain, as Syncope; and at another time, a violent reaction of the System, as convulsions &c? — This is not determined — It probably depends on some irregularity in the balance of the Nervous System; it seems to depend on the degree of the power exerted, for all Hemorrhages that prove fatal generally produce Epilepsy before they kill; but smaller Hemorrhages generally produce Syncope without producing Convulsion or Epilepsy.

From the whole, there arises something towards the explanation of Syncope; which is, that the causes of Syncope are such as suddenly take off the Excitement and Energy of the Brain, and in their operating thus suddenly they affect the action of the heart.

It is probable the Excitement depends on

a variety of other causes. Whatever gives tension to the parts gives tension to the Brain, and the taking off this tension often induces Syncope, as a sudden remission of acute pain. Thus I have seen, in a fracture, after the bones were replaced and the pain abated, a Syncope produced.

I have seen this arise from opening a small pimple over the eye which was formerly attended with acute pain. Likewise the same often occurs upon evacuating water from the bladder by a Catheter after a long retention. —

Under a certain degree of weakness too every stronger effort will produce Syncope, and in the same manner its effects are produced by sudden passions of the mind, such as suddenly take off the excitement of the Brain, as sudden Joy; for I imagine it to be a Law of the System that every excitement is followed by a proportionable degree of collapse. That it depends on such sudden collapse we know more distinctly when we consider it as from the sedative passions, as Fear and disagreeable objects.

It is in this way we explain the peculiar effects of particular Odours, which might be supposed to operate like Fear by a sedative ~~power~~ power, but this cannot be admitted as they then should act more or less on

all persons, but they only operate on those to whom they are more particularly disagreeable.

Syncope is also the effect of a certain state of the Stomach. — Nothing is more common than for Syncope to be attended with vomiting; from which we learn that there is a state of the Stomach corresponding with the state of the Brain that occurs in Syncope, and this state of the Stomach from certain causes acting on it may produce a like state of the Brain. This will readily explain why many substances introduced into the Stomach will have this effect. I have known *Spicacanth* produce it.

I have said that Sedative Impressions in other parts of the System may also operate in the same way. Fevers may operate so, and hence have given occasion to many Syptomatics to name many fevers Syncopeals. — It is likewise necessary to observe, that these causes are peculiar to certain persons & certain states of the System, and therefore we must always take in a predisposition. — In what this predisposition may always consist is difficult to say, but generally we may refer it.

1. To mobility.
2. To weakness.

weakness

weakness, that I have put it as a separate head, is undoubtedly only a part of mobility.

Cure.

With regard to Syncope depending on the first head of causes, these are often incurable, and must be treated according to the particular heads to which they belong, as obstruction in the Lungs &c.

In so far as we can perceive them in the Heart they are cases of Inflammation, Abscess &c. of which we have before treated. —

Syncope arising from the second head of causes is to be considered as almost always alone the chief object of our attention, and is then Idiopathic. The Cure then is

1. To remove the predisponent causes of Mobility and weakness; or
2. To obviate the several remote causes we have considered upon.

With regard to Syncope some difficult & curious questions arise in practice, as concerning Bleeding; which, how far it may be used in people liable to Syncope, has been much questioned. — You will find some discussions on this by consulting *Medic. Senec.*

It resolves, I think, into this; that when we can discern Syncope to depend on a plethoric state with favour the several causes operating by suffocation &c. Bleeding may be useful; but I am really not able to condescend upon bleeding any further but must leave you to M^r. Sennet.

With regard to Syncope from the second head of causes it can never be admissible, but, on the contrary, hurtful.

Dyspepsia

Dyspepsia.

This is one of the most frequent symptoms of disease considering it in the general view of *ferme*. Interruption to the general functions of the System: but as such it does not form a genus. — As, however, it is often an object of practice by itself, and sometimes Idiopathic, I thought it necessary to introduce it into our System.

I own it is in the Synopsis very improperly characterized, but this I could not avoid. It is "idiopathicæ turbata". I have endeavoured to supply the defect by enumerating the symptoms by which it is commonly accompanied. Indeed these symptoms are such as occur when the disease is symptomatic as well as when it is Idiopathic.

I have begun with considering the first Symptom that occurs, viz. *Anorexia*, or want of Appetite, in opposition to Thirst.

The cause of Hunger is a difficult question in Physiology. It has been referred, by some,

1. To the Stimulus of the acrimony of former food and particularly from the reliques of former food becoming Acid; for we observe that even Appetite

Appetite is produced by throwing in Acid into the Stomach. I cannot admit this to be the usual cause of exciting appetite, as it cannot be supposed that the production of Acid under a variety of foods should be as regular as our appetites are. I shall therefore seek for other causes.

2. To an emptiness in the Stomach, but how this operates is not agreed upon. — Physicians, who think of no other sensations but that of Impression, have imagined that the Stomach, when empty, suffers Attrition; but it has always a secretion of Mucus which guards against such attrition. —

We know that there is such ^{affing} as sensations of Consciousness. The more probable account then is to refer Hunger to these; but we must not however be satisfied with this explanation as it would not be a final cause. — It is not enough for the purposes of the Economy that food be thrown in because the stomach is empty; but it is necessary that the whole system should be under a state of depletion; and perhaps this sensation of Consciousness arises from some connection with the rest of the System; for, I believe, let the stomach be ever so empty if we interrupt perspiration we im-

terrupt

interrupt the Appetite, as by any sudden affection of the mind &c.

Nothing likewise is more evident than that all means promoting perspiration will cause a quicker return of appetite.

Cool or Cold Air has likewise a share in promoting the Appetite, for in cold weather we have stronger appetites. — How this operates on the Stomach is difficult to say; we must consider it as operating on the System itself, that perspiration in moderate degrees of cold proceeds more quickly than in heat, tho' heat seems to determine the perspiration so much to the surface.

From all this then I believe that appetite depends on a connection between the Stomach and the extreme vessels on the surface of the body, and that the action of the extreme vessels have a corresponding state with the fibres of the Stomach, and that they constantly & mutually affect each other, and that Appetite depends on a certain vigour in the fibres of the stomach, which produce an unusual sensation when they do not find matter to act upon.

Anorexia then is a mark of a certain debility or Atony in the fibres of the Stomach. —

It may not only be produced by the various causes mentioned, but by a variety of other causes acting on the Sensorium and producing the same debility in the Stomach.

I. Causes acting directly on the Stomach, giving the Idiopathic Dyspepsia.

1.st The frequent use of Sedative powers of Aliment weakening the tone of the Muscular fibres of the Stomach.

a. Tea.

Many impute the effects of this to its being drunk diluted with a quantity of warm water; but I know that this is not entirely the reason of its bad effects, for I am certain that Tea chewed would have the same effects.

Some say that it is not owing to the quality of the Tea, but to the quantity of the Liquor taken in with it.

I can give an instance from my own person against this opinion; for when I drink weak Tea, when I increase the quantity of it, it has no bad effect on me; but when I drink a stronger impregnation of the Tea it affects me very much. From this I am certain that Tea is a narcotic substance and capable of destroying the Tone of the Fibres of the Stomach.

Dyspepsia.

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b. Bitters.

I suspect these to have the same effect. These I have had occasion to speak of before when mentioning Portland Powder.

The loss of tone then in the Fibres I think is chiefly by the effects of Narcotics; for I find in the Turks, and such people using Opium, that a loss of tone, and all the symptoms marked in our Dyspepsia, occur. — Opium is likewise remarkable for allaying the appetite, and enables the Turks to refrain from eating a long time.

I have observed that people, the day after taking opium, generally loose their appetite. It is ^{to this} I likewise refer the loss of appetite occurring to people the day after having got drunk.

c. Tobacco.

This may destroy the appetite both by destroying Sensibility and by the throwing up of so much Saliva in chewing it. I however think it more directly to be referred to its Narcotic quality. Applied to the Stomach it destroys the tone of it to a very great degree.

d. Any quantity of Putrid Matter.

We know these to be powerful Sedatives, and to this effect

their operation on the Stomach may be referred.

2^d The frequent use of Stimuli.

Any Stimulus applied to the Nerves appears in consequence of repetition to loose its power very much... It may perhaps be owing to this that every degree of Excitement is liable to a proportionable collapse.

a. The frequent & plentiful use of Aromatics.

It is true that we may use a quantity of these with out perceiving any bad effects; but in general, by a long continued use of them to excess, their effects are pretty evident.

3^d The copious and frequent use of Relaxing powers.

a. Warm Milet.

It is not easy to conceive that this can have such relaxing power with regard to the Internal surfaces as it has to dry surfaces, as the Cutis; for warm water cannot be supposed to be applied to such internal parts as these are provided with a mucus which guards them. I therefore do not consider the action of it as an Emollient, but we must take in the effects of heat.

It is however rare that we can take in liquors hotter than proper. This then affords a difficulty, yet
in

Dyspepsia

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in spite of it I think it is evident in fact that the frequent and copious use of warm water does destroy the tone of the fibres of the Stomach.

Perhaps Cold Drink is necessary as a stimulus to excite the action of the Stomach and that on account of the want of this ordinary stimulus, which Nature has suited to the Economy, the effects of warm water may be imputed; or that cold food gives a proper stimulus to the Stomach and liquids alone do not, and therefore to the want of these two Stimuli, Solids and Cold, the action of warm water may be imputed. — These suppositions however I leave to your own Judgement.

N^o 4 The frequent over-distension of the Stomach. As this applies to every muscular fibre of the System we can have no hesitation in applying it to the Stomach.

a. All food taken into the Stomach becomes, by means of elastic air, more bulky; a greater quantity then than usual being taken in is a means of destroying the Stomach. It acts more powerful as it is more constantly repeated.

To the same head is referred the effects of the frequent use of Vomits.

I have known many young women, usually take any measure for a good complexion & chase, who, because they could not refrain their appetites, took a permit afterwards, by which means they lost the tone of their Stomachs. Perhaps however there may be only a few instances of this kind, but there are many instances of it in diseases, for, often in diseases, many food disagrees with the Stomach and are thrown up, and practitioners too often encourage the Stomach in so doing. I know it however to be a very certain means of increasing that cause for which they had recourse to medicines.

5.th By the want of usual and necessary Stimuli.

a. I have already mentioned the want of solid food and cool liquors.

b. The want of Saliva, a stimulus that nature constantly provides itself with. — When it operates I cannot say, but we know that by the abstraction of the Saliva, as by chewing Tobacco, a loss of tone in the Stomach is produced. Probably too the Gastric and Pancreatic Juices and the Bile may have the same effect as the Saliva.

These are the several causes operating directly on the Stomach and destroying its tone, whereby they take

take away the appetite and introduce the other symptoms of Dyspepsia which we are about to mention.

II. Causes acting on the Stomach, but indirectly, by first operating on the brain.

Thus the tone of the Stomach is affected in consequence of any long continued state of grief & sadness. - Hence these causes affect directly the Sensorium and in consequence thereof the Stomach is easily understood; but we have reason to believe that there are affections of the different parts of the System which are thus communicated to the Stomach, as an Atony in the fibres of the extreme vessels of the surface of the body.

It is highly probable that not only atony taking place in the fibres of the surface can thus operate, but likewise atony of several viscera; thus the tone of the genitals & Uterus is remarkable in affecting the Stomach and various affections of these parts are communicated to the Stomach in ways which I can not explain; thus the obstruction of the menstrual flux and the chlorosis are often attended with a want of appetite, as likewise are affections of other viscera, as Schirrosities of the Spleen, Liver &c.

I will insist on an explanation of this, but I think

Dyspepsia

Ch.

think it is by an Atonic state communicated from these viscera to the Stomach. Perhaps the Stomach may be connected with the vessels of the Lungs, which I endeavoured to explain when treating of the Heart.

The Kidneys may be supposed to affect the Stomach in the manner the other viscera do; but perhaps the kidneys are in the state of this extreme weakness, and when the former are affected with a tany it is frequently the cause of the same taking place in the Stomach.

I have now mentioned the several causes of Anorexia, and if you add that this often produces the other symptoms of Dyspepsia you will find that I have explained the loss of tone in the Stomach. — It is however proper to go farther and consider the other symptoms of Dyspepsia.

The next symptom that occurs is Nausea.

This very obviously may be considered as a higher degree of Anorexia, and a still higher degree is Vomitus. — Anorexia & Vomitus are then the extremes of the same symptom. If therefore these are explained, the intermediate state, Nausea, will also.

Vomitus

Dyspepsia.

Vomitus.

65.

The most simple theory of its cause is a direct stimulus applied to the stomach. This may be the case sometimes, but it is a very general mistake in Pathology to seek for such direct stimuli in all cases of increased impetus. By this means we have been led to overlook sensations of Consciousness. Boerhaave, when treating of Nausea & Vomitus, attempts to find out direct stimuli and entirely overlooks every other cause. I have touched this subject when on Fever, but shall shortly repeat a few things with regard to it.

Vomiting is a frequent attendant of Syncope, which arises from causes that cannot be supposed to act on the stomach; as if a sound man, upon being bled after Syncope, falls into a vomiting; this must arise from a debility suddenly induced and acting on the stomach. Besides, many disagreeable sensations in which there is no suspicion of stimulus applied to the stomach, as disagreeable tastes on the tongue, will produce the same effect. Further, many things taken into the stomach, which excite vomiting, cannot be supposed to act as Stimuli, as warm water, fat

fat meats &c. But especially from many cases of Anisyncrasy, as in some people mild ailments excite vomiting. Opiales too, tho' contrary to Stimuli, often excite vomiting.

I have no doubt to suppose that it is in confirmation of this doctrine that, when the Stomach labours under Inflammation, which renders the least action of the Stomach uneasy, any thing, even of the blandest kind, will excite vomiting. The evacuation is not in proportion to the irritation, for the mildest matter will have this effect. We have instances of the stomach being under such a state of debility, that every action of it is attended with uneasiness.

To conclude, I will by no means assert that no Emetics act as stimuli, but I will insist that most of them act by being disagreeable, & many of them act by their nauseous taste alone. Many too even by the sight will produce Nausea & vomiting. — This then, is not reconcilable to their operation by a Stimulus. Nausea may certainly arise from disagreeable impressions, but it often arises from a sense of debility.

Upon the whole then, Anorexia, Nausea, & vomiting, all arise from one & the same cause, a debility in the fibres of the Stomach.

Dyspepsia

67.

Our next Symptom marked is *Inflation*.

By this I mean a considerable stultent distension of the Stomach.

When a quantity of food is taken into the Stomach, it is detained therein sometime, for the purpose of Solution, which it is intended to undergo. We cannot conceive how the solid parts of our food can suffer any considerable increase of bulk, but we know that soon after the food is taken in, a considerable distension arises, which we have no doubt of imputing to a quantity of Air changed from a fixed to an elastic state. This always takes place in a certain degree, but only when it is in an unusual degree, it to be considered as the marked symptom we speak of. It is necessary we should enquire into the cause of this.

It is sometimes to be imputed to the stultent quality of food taken in, but mostly to a weak state of the Stomach. — There are certainly powers in the Stomach, when in a sound state, that gives occasion to the reabsorption & inviscating of such air. This seems to depend on a vigorous action of the Stomach that keeps the whole mass under a certain triture, by which the Air is tritu-

into the smallest particles possible, and this is all that is necessary to the inviscating of the air.

With regard to the reabsorption of air this undoubtedly takes place, which we must impute to the Saliva, Mucus, Gastric Juice, &c. of the Stomach.

Whenever therefore there is a subsistence of air in a detached state in the Stomach we must impute it to the want of a proper quantity of these Juices, and therefore flatulency is always a certain mark of greater weakness in the Fibres of the Stomach. This Symptom then likewise occurs, with the ~~former~~ former Symptoms mentioned, in a debility of the Stomach.

The Air is generally carried up to the upper orifice of the Stomach, through which it does not readily pass on account of that part not easily yielding to any impulse distending it, but causes an uneasy sensation so as to produce an inverted action of the Stomach until this upper orifice be opened, and this induces, what is marked as our next Symptom, the Ructus. This is different from vomiting, because it has not combined with it the action of the Diaphragm & Abdominal Muscles. This then, as it depends on a too copious Elastic Air, is in consequence of a weaker action.

Dyspepsia.

69.

action of the Stomach.

Our next Symptom of Dyspepsia is Ruminatio.

This is an inverted motion of the Stomach, which occurs in all Ruminant Animals. It is what we call Belching. -

But solid food is almost always lighter than the fluids they are immersed in, and when these are pushed upwards into the Oesophagus to be thrown up by the mouth it gives the Ruminatio. The cause of it I say is a mark of a weaker action of the Stomach, and a Symptom of a less perfect mixture of the contents of the Stomach.

The next Symptom occurring is Cardialgia. - To any of you who are critics in methodical nomenclology this may appear doubtful.

I know two kinds of Pains affecting the Stomach, are I suppose confined to the upper Orifice of the Stomach distinguished by a sense of heat and burning (between which two it is difficult to distinguish) which spreads more or less upwards along the Oesophagus. It is that pain which Linnæus & Vogel have expressed under the name Soda, defined by the former "Oesophagi dolor ruscus" - *diversus*

Dyspepsia.

70.

"durens Nucleus calidis," by the latter "Dolor urens calidus e ventriculo in facies affurgens."

But I have distinguished this by the name Cardialgia commonly called the Heartburn.

It may arise from any unusual quantity of acid matter applied to the Cardia of the Stomach, and therefore may arise from the Acrimony commonly in the Stomach if the Cardia has acquired a more corrosive state.

The most common cause of universal acrimony in the stomach is that of Acid Acrimony. This then is a further proof of the weakness of the Stomach.

There is here an Acid always generated. It is evident that on many occasions Acids & Acrids are taken into the Stomach in very large quantities without producing Cardialgia, Nucleus &c. so that there must be some means for covering or neutralizing this Acid matter.

I will not mention the various Theories assigned for this. Overhawe accounts for it, merely from inviscation. It depends on the action of the Animal fluids, as Saliva, mucus, Gastric fluids, &c. It will therefore evidently appear that a larger production or a longer sub-

sistence

Dyspepsia

71.

subsistence of Acid in the Stomach will be owing to a defect of the Gastric Liquor, and this will commonly be owing to a weaker action of the Stomach in emulging these vessels.

But in another way may the weakness of the Stomach contribute to the subsistence of Acid therein, according as it gives occasion to the evolution of air, for the same cause that gives occasion to a greater quantity of air being produced will also give occasion to more Acid.

The Acid of the Stomach, whether introduced or produced, is certainly imbricated & absorbed in part in the Stomach itself, but never sufficiently so without the application of Bile, and therefore the prevalence of Acid may sometimes be imputed to the want of this.

In Schirrhosis of the pylorus, where that part is obstructed, we know Acidity to prevail in a high degree; so much that I have even known the Acid erode the Lumen it happened to fall upon.

When Acids appear to be prevalent in the Alimentary

Dyspepsia

12.

Alimentary canal, it must be imputed to the slow motion of the Stomach. to its slow evacuation that occasions the acid to contract an acrimony.

On the same footing I explain Acidity arising from acescent matter remaining long in the Stomach, hence vegetables, as most slow of dissolution, are the longest retained, and give cases of the most considerable Acidity.

Therefore I consider the prevalence of Acidity to be owing to the weaker action of the Stomach and loss of tone in its fibres.

The next symptom is *Gastrodynia*!

This is without *Pyrexia*, hence differs from the *Gastritis*. Other Nosologists have been obliged to consider this in the same view. Sauvages defines *Gastrodynia* "Quicumque dolor notabilis et varians in regione stomachi, per continuam animi applicationem non dissipatur ut cardialgia, nec pyrexia ut gastritis." Linnæus defines it more general, viz. "Ventriculi dolor hypogastrii." Vogel is more explicit, he calls it *Periodynia*, and defines it "reptentis dolor."

We must take the *Gastrodynia* for an acute pain limited to a certain space, to distinguish it from a *tension*

Dyspepsia

73.

distension or flatulency the Spasmodic of Vogel.

The gastralgia depends on a Spasm. It is not an Inflammatory pain. We know but three or four sources of pain.

1. From impression of Acids, or Mechanical impression.
2. Distension, which I take to be the source of Inflammatory pain.
3. From Spasm: a violent contraction of muscular fibres.

A. Depends on Excitations propagated from one part to another, and becoming considerable, where they accumulated in consequence of resistance.

Almost all Acids are felt at the upper Orifice & give the proper Indication. It may be owing to direct Stimulus, but for the most part it depends on a state of Atony that disposes to Spasm. It may therefore be allowed to concur with the other Symptoms in a Cat of tone of the Stomach.

The *Alvus Obstructa* is a Symptom remaining to be considered.

We know the Peristaltic motion is performed with different degrees of Velocity; we have instances of Ingesta becoming excreted in the space of an hour.

Dyspepsia.

71.

hour. In general however the disease runs its whole course in the space of 24 hours. Some people however are in good health and do not go to stool above once in eight days. —

The retardation chiefly occurs in the colon, and depends on the heats action of the Intestines. It depends on the dryness of the colon and hence every means of increasing perspiration is a means of retarding the secret.

In Dysentery we said there. Medicines are most effectual that excite the small guts, and we may conclude the slow belly is owing to the weaker action of the intestines in general. This may arise from causes acting solely on the stomach, the intestines remaining the same. So this may must impede why women are most liable to costiveness. I think the same holds that so often attends the melancholic temperament must be referred to the general torpor of the system determined to the alimentary canal, and the obstructed depends on the same cause.

It is difficult to mark this disease exactly. We have considered it as more especially united by its proximate cause, the debility of the fibres of the

the Stomach. This is proper to distinguish it from the ordinary affection of the Stomach.

There are certain organic affections of the Stomach, such as Schirrus or Ulcer, which interrupt the function of Digestion: but these are combined with a want of tone, both which concurring produce the disease. It is difficult to distinguish by external symptoms these cases that are considered as idiopathic and what are considered as Sympathies.

Though I have marked several causes acting in the Stomach itself, yet many of these causes are not frequent. The Sympathies cases are much more frequent, and I shall speak of these several kinds of these.

1. Dyspepsia Febrilis.
2. Dyspepsia Paralytica.
3. Dyspepsia Nephrochondriaca.
4. Dyspepsia Hysterica.
5. Dyspepsia Chlorotica.
6. Dyspepsia Icteronica.
7. Dyspepsia Hemorrhoidalis.
8. Dyspepsia Aetholica.
9. Dyspepsia Arthritica.
10. Dyspepsia Nephritica.

Dyspepsia Febrilis &c

76.

1. Dyspepsia Febrilis.

I before endeavoured to point out how the causes of Fever affect the Stomach and produce cases of Dyspepsia. The febrilis will always be considered symptomatic. When fever has been present it is liable to a relapse, and hence to affect the Stomach; and I have had some obstinate cases of Dyspepsia from the imperfect solution of Intermittents.

2. Dyspepsia Paralytica.

This is not a frequent occurrence, for the vital & natural functions are not often affected, only the animal, but in some cases it extends to the sanguiferous system, and even to the natural functions of the Stomach. It will however give us little disturbance in practice whilst the principal disease, palsy, is present, and will only be considered as symptomatic. Paralytic affections are a long time preceded by symptoms of Dyspepsia. They are frequently combined, and I believe there is a Dyspepsia depending on the Diathesis paralytica.

3. The Dyspepsia Hypochondriaca has occasioned confusion; I mean that which occurs in the melancholic Temperaments. I know that the Hypochondriac affection has been considered as a case in which

Dyspepsia Hysterica

77.

which the mind was also affected. You know well how far the affection of the mind is an essential circumstance in melancholic temperaments. Linnæus defines *Hypochondriasis* "Imaginatio pati lethalis, seu malis, verborumque, sicutus acidi, palpitationes, precordia tremula, perussio." Vogel defines it "Inquietas precordialis, cum humore ventriculi ac intestinorum, variisque congestionibus conjuncta, chronica, you therefore observe that affections of the mind are in these disorders marked as a principal part of the character, but I find these symptoms of the mind sometimes present, sometimes absent, even in the same persons and in cases that in every other respect are the same. I therefore think it necessary to limit the *Dyspepsia Hysterica* by its causes, and therefore I think "in temperamento melancholico" should have been added.

A. *Dyspepsia Hysterica*.

This, when properly limited, is to be esteemed a spasmodic affection of the elementary canal, and that occurring from peculiar causes that distinguish it from other cases of *Dyspepsia*. These convulsions will leave the stomach in such a state as to have a *Dyspepsia* in the stomach. So that this *Dyspepsia Hysterica*

Dyspepsia Chlorotica.

10.

Hysteria arises from a weaker tone of the Stomach occasioned by a preceding Hysteria. Those causes, which have a great share in exciting proper Hysteria may perhaps produce Dyspepsia only by operating in a less degree.

3. Dyspepsia Chlorotica.

The Theory of this is very difficult. The reason is because we have so little attended to the Atony and communication of Atony.

The chlorosis consists in a loss of tone in the Stomach &c; and as the Sympathy between the Uterus & Stomach is considerable, the affection is easily communicated from one to the other.

This leads me to two remarks necessary to complete the enumeration of Symptoms of Dyspepsia.

The chlorosis is constantly attended with other Symptoms of Dyspepsia, and it is attended with Anorexia and the fundamental Symptoms of Dyspepsia. (But we find the Dyspepsia Chlorotica to be attended with a very keen appetite, and the question is how far this may be referred to Dyspepsia, as in this Case the solubility of the Stomach is the principal fault.

Appetite may arise from Sensations of Sensation.

Dyspepsia Chlorotica

19.

ness; it arises from a want of sense of distension, and is always removed on procuring this necessary distension.

Her natural appetite depends on the due tone of the fibres of the stomach, and is weakened for want of something for the fibres to act upon. — It is, however, as we mentioned, that chlorosis depends on the debility of the stomach, but some difficulties present themselves here. I mentioned Appetite as depending on Sensations of Consciousness, for, that it really depends on the due tone of the fibres of the stomach, yet when such a state occurs, those sensations will be more perfectly felt.

Cravings & Appetites arise from the want of usual stimulus. If a person has been used to a Gram he requires it at the period he has been used to it and then the stimulus occurs. Hence an appetite may arise merely from a want of stimulus. Such appetites from unusual causes are apt to be irregular and cease for want of food. In the nature of our food we are governed by habit, and hence the difference of food in different nations, who are peculiarly fond of that food they have been long accustomed to.

There are some appearances to be observed in dyspepsia

differently. Appetite may not only arise from want of action in the Stomach, but from increased action which is a consequence of debility. I have given up the Theory of Spasm because I say this depends on a state of Atony. Though we allow various convulsions and irregular increased action depend on atonia, and such actions are evident in the gravid uterus, the Morbus Ventriculi &c, this I consider as an increased action & constriction in the fibres of the Stomach approaching to Spasm.

This Morbus Ventriculi is sometimes an uneasy sensation without appetite, at other times with appetite; and, by taking a few mouthfuls of bread, it is commonly relieved; hence this morbid symptom is a convulsive action arising from Atony.

These Symptoms of the Morbus Ventriculi might have entered into the character of the genus but in referring it to Atony was unnecessary.

The Dyspepsia gravidarum might be mentioned which we must pass over.

6. Dyspepsia Catamenialis.

We observed, according to the state of the menses, if the flow is retarded and totally suppressed, the Stomach immediately feels the effect of it, and the

Dyspepsia Cachectica &c.

21.

the affection is of the spasmodic kind.

In our diagnosis of the flux albus, where we mentioned the fluids being poured out from the same vessels, I mentioned the flux albus shows more of the Dyspepsia, the morbus ventriculi and Gastrodynia.

Having now pointed out the various cases of Dyspepsia connected with chlorosis, I must say all these cases of Dyspepsia have been confounded with Hysteria, and the Dyspepsia has been confounded with both this and the hypochondriasis.

7. Dyspepsia Hemorrhoidalis.

When the Hemorrhoids become habitual they become a part of the balance of the system, and hence the diminution or flow of them have an effect on the system, and like uterine, affect the stomach. The Anatomists give numerous instances of this connection, and Hoffman also.

8. Dyspepsia Cachectica.

The Ancients have delivered to us a disease under the title of cachexy. This is a general term and not properly explained. So far as we can consider the term with precision we must consider it as

Dyspepsia Cachectica.

82.

a beginning Anasarca, where the Anasarca arises from a general loss of tone in the exhalant and absorbent vessels. This state of cachexy we find connected with Schirrasities of the abdominal viscera and this occasions a stagnation of venous blood which produces Anasarca. But in many cases the obstruction of venous blood is not sufficient to account for these appearances; for there are many cases of Schirrasities, even of the Liver, that do not produce Cachexy. When it occurs the Action of the viscera is communicated to the Stomach, and gives the Dyspepsia Cachectica.

There is one case of Cachexy, and concurring Dyspepsia, which arises from dried up Menses, which produce Dyspepsia, Cachexy, & Dropsy. By these practitioners and old Writers, they say, a return of menses was discharged from the system, and these being dried produced a retention of the Perimeny. According to this Theory it must operate as a Sedative in destroying the tone of the Stomach.

In most cases however the Perimeny is imagined, and at present we have only to consider the Theory it produces, which, beginning in other parts, are easily transferred to the Stomach. On this subject I would

Dyspepsia. Arthritica. & Nephritica 83.

would recommend the perusal of Morgagni's 53th Epistle de Sedibus et causis morborum. A woman had an Ulcer in the mamma that did not yield to external applications. This was connected with a suppression of menses. The menses however some time after began to flow, and instantly upon that the ulcer began to heal. This may make us cautious in referring so much to Acrimony as we have done.

9, 10. The Dyspepsia Arthritica & Nephritica we have treated of differently in our doctrine of the Joint.

Cure.

Our Cure should be directed only to the Idiopathic Dyspepsia. The State of the Stomach we have seen is indicated by affections of other parts of the System, and hence restoring the tone of this will have the effect of restoring the tone in the other parts. The Stomach is open to our applications and by this we can remedy the state of the other parts. The Stomach is open to our applications, & by this we can remedy the state of the other parts, and hence the importance of treating it as Idiopathic.

(The)

Dyspepsia

84.

The Stomach is connected with the Veins on the surface, and both these have considerable effects on other diseases.

The Indication is to restore the tone of the Stomach; but, as this may require time, we must be intent on avoiding the remote causes, in obviating those symptoms which may aggravate or continue the disease.

The Indications then are

- I. To avoid all Remote Causes.
- II. To remove certain Symptoms that are of such a nature as to aggravate and support the disease.

III. To restore, directly, the tone of the Stomach.

I. The avoiding of all Remote Causes.

The Remote Causes I have already hinted at. The indolence of mind & body have great effect in destroying the tone of the Stomach. Our stomach stands in need of external impressions, if it was not for these we should be in a constant state of sleep. The functions of life and their exercise i.e. sense & motion is necessary to the supporting the tone of the ~~General~~ System and of the Stomach in particular. The exercise of the mind may not seem to import,

but

Dyspepsia

25.

but it is necessary the mind should have some pursuit. I have known Dyspepsia cured by an employment that constantly exercised their mind & body.

Another remote cause is every over exercise of the Stomach, all over distension or taking in Aliment difficultly soluble. Late rising weakens the Stomach. Most people do over stretch their stomach, and the quantity of food might be considerably limited.

Among the remote causes I mentioned certain habitual Ingesta of a narcotic quality, as Tea & Coffee. The latter is not perhaps so remarkable for its enervating effects, but it has this effect in a considerable degree.

I mentioned the use of Tobacco, which enervates the tone of the Stomach by its Narcotic power. A gentleman who was affected with Dyspepsia found that it was entirely owing to an immoderate use of Snuff. — Narcotics have especially their effects when they are taken to a degree of Intoxication. All other means of enervating the system are to be avoided. Among these is excess of Venery.

Warm drinks are to be avoided, and No

Dyspepsia

86.

on the subject of Sea Sickness a great deal to the impregnation, yet this must be considered.

Cold thrown upon the lower extremities arrests the action of the alimentary canal; but it will also have the contrary effect producing all the symptoms of Dyspepsia &c. &c. &c. and hence it is to be avoided. I have known Dyspepsia cured by the use of a flannel waistcoat. Also warm climates prove often a cure for the Dyspepsia.

Another remote cause is any considerable Moisture in the Air, and this explains why many have Dyspepsia in Winter, and why some feel it only when moisture prevails in the Air.

The avoiding the remote causes is very often enough to cure Dyspepsia, and the study of the avoiding remote causes is very ^{particularly} necessary, because we frequently find that how much pains some will take to restore the tone of the Stomach it is but lost labour unless we avoid the remote Causes.

II. The removal of certain Symptoms that are of such a nature as to aggravate and support the disease.

The Symptoms which I have chiefly in view are

1. Nausea

Dyspepsia

87.

1. Indigestion.

2. Acidity, and

3. Costiveness.

By Indigestion I mean a want of the due evacuation of the stomach, the long retention of aliment therein, and in consequence thereof the generally irritated state of each Aliment.

By food being longer retained in the stomach it undergoes a more considerable fermentation, and thereby will prevent a fermentation to the new food ingested and thus aggravate the disease. It will likewise be a cover to the coats of the stomach so as to prevent the efficacy of any medicines we might employ.

This Symptom is to be obviated by Vomiting. Upon this account it is that Vomits so commonly begin the cure of Dyspepsia. It is however, better to notice, that Vomits are useful upon another account, for Vomiting determines to the surface of the body, in consequence of its exciting the action of the fibres of the stomach.

The means employed for Vomiting are of two kinds.

1. By warm water alone, or impregnated with Bitters, green tea, or with certain stimuli as horse-radish

Dyspepsia

88.

radish, hartshorn &c.

2. By substances exciting the nausea more particularly, as Ipecacuanha &c. We can continue the repetition of vomiting by throwing in warm water &c.

If the evacuating the present contents of the Stomach is all that is wanted, the first head of Vomits will answer; but if it be necessary to excite the action of the Stomach more powerfully, then the second head of Vomits is absolutely necessary. In the practice of procuring Vomits a few things are to be noticed.

a. Nothing is more common than a quantity of viscid mucus to be thrown up by Vomits, which is apt to be imagined as a cause of the Anorexia &c; but I say there is no reason for it. Mr. Donae found that by squeezing the Stomach he could press out a quantity of Mucus, which is clearly in proof that the follicles of the Stomach afford a vast quantity of this Mucus, and therefore under the action of Vomiting this Mucus may be pressed out.

b. Sour stuff is likewise frequently brought up by a vomit, yet I do not allow that this is a proof that Acidity prevailed and was the cause of the symptoms

Dyspepsia.

29.

Symptoms of Dyspepsia.

1. A quantity of Bile is often thrown up.

I know that the Biliary ducts will be irritated and throw up their contents, and that under the inverted motion that occurs in vomiting it will be easier.

These symptoms may, to be sure, be sometimes the cause of the disease, yet by no means, because thrown up, are they to be imputed as the cause. I say likewise that they do not lay the foundation for the frequent repetition of Vomits, for I know that there is no end of giving Vomits to relieve them. Vomits are certainly of service, but such frequent Vomits, tho' they give temporary relief, are not to be practised, for they encrease the weakness of the tone of the stomach, and increase likewise the symptoms they are intended to relieve.

2d Acidity.

I have formerly explained in what manner this is a cause of the symptoms of Dyspepsia.

If I observed that Acids will act as Antrenates upon the lips in occasioning a constriction I know it will act in the same way on other vessels. They may therefore act in the same way upon the stomach.

omach; but we should be cautious, for sassa acids are found useful Stimuli to the Stomach. Very probably it is not so much owing to the Acid as to some peculiar circumstance of fermentation. It is however observed that it is much more commonly the effect of Alacents than Acids. I own that it is also frequently the effect of fermented acid, as vinegar; but this may be easily explained, for there is no vinegar that is perfect.

There are likewise grounds to expect that it is owing to the Mephitic Air that is constantly evolved.

I believe then that the consequences of acidity are more commonly to be referred to this Mephitic Air; but this will not affect our consideration, for the one is the consequence of the other.

These considerations tend to show that Acids have the power of hurting the tone of the Stomach, and lead to the avoiding of all Alacents and of animal food in Diet.

In the cure of Dyspepsia nothing is more evident than that Acids are to be avoided. I know many instances of a very small quantity of them producing very considerable disorders. I know a Lady who was frequently attacked with a ^{violent} pain of the Stomach, who
being

being persuaded to leave off the use of tea and all fermented liquor, it had so good an effect as to cause the pain to leave her for a twelve month. The Lady at the expiration of this time being in company (of which I myself was one) eat a bit of Lemon peel, and in a very short time afterwards I was sent for to visit her under the most violent pain of the Stomach. I mention this to say that the avoiding acceffcents is very necessary. Yet however, sometimes pushed too far; for I have known some people on account of their having Dyspepsia avoid vegetable diet so much as to have a Sea Scurvy brought on. I likewise say that our System lasts in proportion to its being exercised; if a part is much exercised it sooner wears out, and the balance of the System is more delicate according to its fullness; and Animal food by keeping the Stomach extended & exercised, is exposed to diseases, and therefore I say that even weak Stomachs should keep as much to vegetable food as their Stomachs will well bear. And that tho' the unfermented Farinacea are liable to give Avidity, yet less so than the Olera and the fruits, and therefore by avoiding the Olera & fruits we shall be able to take much vegetable food notwithstanding the weakness.

ness of the Stomach.

There are few people under Dyspepsia who have not their stomachs in different states of vigor at different times. I know a person whose Stomach is liable to admit Acidity only in consequence of excess of Tenony. I myself, who have at present a weak stomach, cannot bear much wine, yet I know when my stomach is in much vigour I can bear a pint of Sack. I therefore always recommend it to people who labour under Dyspepsia to avoid such disagreeable Aliment as they shall observe to disagree with them.

In avoiding Decemts we are in a particular manner to avoid fermented liquors, for new wine, ale &c are of the utmost danger. All wines therefore that have not undergone a perfect fermentation are hurtful, and therefore in the choice of wine we are always to choose those that are most fermented. The greater proportion of Spirits they contain, whether added by art or in consequence of fermentation, the safer they are. Persons with Dyspepsia should avoid malt liquor of all kinds. A person will sometimes bear Porter when he cannot any other malt liquor, ~~the~~ the reason of which is that the

best food is much advanced in fermentation. Persons with Dyspepsia being sensible of this sometimes take to drinking water, but to persons before accustomed to Wine & strong liquors water will not do.

The Acidity is to be abated or corrected if taken place, by Absorbents, Lime water, Alkaline salts, and Soap. The absorbents and soap have an advantage in affording no Nourishment to the System only in consequence of the Acidity it meets with. We therefore use them more safely than we could do pure Alkalies. Soap contains a quantity of Salt, and I believe it is owing more to this that it proves a Laxative, and therefore is of use in Dyspepsia. With regard to Absorbents there is a choice, for Magnesia will not only absorb but will also prove a purgative, and therefore, calomel paritoid is preferable.

With regard to Alkalies, I think the Caustic are more effectual than the Mild, and this is the only foundation I find for the preference of Lime water. It is difficult to say what this is to be imputed to, perhaps because the Caustic Alkalie is more readily applied to the Acid than the mild, or perhaps the Acid is more dissolved in mucus which the mild caustic perhaps has little effect upon but the Caustic has

has; or perhaps the Caustic Alkali may absorb a portion of Mephitic Air which I have said is in the Stomach.

3. Costiveness.

This implies a slower action of the Stomach, and of the whole Intestinal Canal, a longer retention of the contents, and therefore it must increase Indigestion; for, as increased peristaltic motion must increase the action of the parts above as well as below, so diminished action will communicate to the parts above as well as below, and therefore to the Stomach; and it is in this way I explain how costiveness aggravates Dyspepsia. A regular course of the Intestines is therefore to be observed in Dyspepsia. Some however say that Purgings is hardly proper as it always leaves behind some Atony and Restriction; and, by the degree of emptiness it produces, gives occasion to flatulences, one of the Symptoms of Dyspepsia.

Our Intention therefore is to obviate Costiveness, not to purge; but as obviating costiveness is hardly to be done but by purging, I always desire my patients if possible to obviate Costiveness by Diet. With regard to this I find it difficult, because almost every different person requires different directions in

this respect; for there are persons that will be purged by red wine, and not by white. In the case of malt liquor I know some people purged by Porter, others not but purged by Beer or Ale, and so it is with regard to food. The Mera will prove Laxative to many, but to others they will prove constive. There is then no general rule, but it must be learned by the patient.

Either from want of attention in Patients or such diversities in their ^{constitutions} I have ^{frequently} found it not to be executed thus, but that we must have recourse to Medicines.

The gentle laxatives are Acid fruits, and more particularly saccharine substances, such as Manna.

But these are liable to the objections the Mera are; for they are liable to generate acidity and flatulency.

The Laxatives next in degree are Neutral Salts, but these come to be in the condition of an irritant Acid purger, for one ounce of them will move a person once or twice and will give a large quantity; but when perhaps a less quantity is given it will not operate in the least. Neutral Salts too certainly operate on the Intestines by a Sedative power

power leaving them more liable to flatulences, and tho they do not leave so much Astringency and are more permanent in exciting the peristaltic motion, yet they do leave some Astringency and induce the Astringency we mean to obtain.

A barely grain of Salap is a purging dose, yet if you give only fifteen grains it will perhaps have no effect. Twenty grains may give twelve stools, yet perhaps ten grains will give none. The Management of Costiveness then by purges is attended with considerable difficulty.

Clysters are fit when only the contents of the Great Guts are to be evacuated, but because they operate only on the great guts they can have no permanent effects in abating Costiveness, and their repetition is disagreeable.

We want an internal Medicine that will stimulate the great guts and excite their action, as the peristaltic motion is their true power. I take place to be of this kind. In the smallest dose it operates often as much as in a much larger, five grains is sufficient to procure an evacuation, 10 or 15 will often do no more. So then it operates more considerably on the great guts

Dyspepsia

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quies it proves the very medicines we want. The Theory of it is I think unknown, and therefore I am not clear in giving you the different forms in which it might be exhibited. I can only say that the digestion of it in bitter extract or with the addition of some saline matter is much favourable to its operation. Does with bitter extract and Sac Polychrest is a very good formula.

Another laxative is Sulphur.

This will prove laxative, yet can hardly be rendered a purge, and is therefore particularly suited to obviate costiveness. Whether it is analogous to Does in operating on the great and small cannot determine. In the Piles where costiveness is to be avoided, Sulphur proves an excellent medicine, but it generally requires a bulky dose, ℥ss. to ℥j, that is disagreeable to all weak Stomachs in which account I have been frequently disappointed of its good effects in Dyspepsia.

Oleum Ricini.

This is a very effectual laxative, and may be rendered a purge by giving a large dose. I

will likewise operate proportionably, in a very small dose, and abates costiveness with very little purging, and not leaves the astringency the other purges do.

This finishes the consideration of the three symptoms necessary to be removed, viz. Indigestion, Acidity, & Costiveness. I could have noticed a fourth one, viz. Depression of spirits, but I refer this till I come to speak of the Affection Ariasis.

III. To restore directly the Tone of the Stomach.

This is to be done,

1. By applications made directly to the Stomach itself.
 2. By certain medicines applied to the whole System.
- First. By applications made directly to the Stomach itself.

Of these we have two kinds,

- a. Those which are simply Stimulant, only exciting the action of the Stomach.
- b. Those giving permanent effects in supporting the tone of the Stomach, under the title of Tonics.

a. Those

a. Those which are simply Stimuli.

1. Aromatics.

There is no doubt but Aromatics & some Acids may be considered as simply exciting the action of the stomach, and in this way we should have no difficulty in understanding how they cure Cardialgia; but there is something more, for they are directly Carminatives, they produce Aetus and expel wind, which is an operation more difficultly explained. In the soundest stomachs some of these Aromatics will immediately produce Aetus. A simple manner of accounting for this Phenomenon is, that the action of Aetus is an inverted motion in the whole of the Gastric mass that pushes against the upper orifice of the stomach and will dilate it, and it appears that this inverted motion is owing to some uneasy sensation in the upper orifice of the stomach, and it is very easy to allow that the ~~upper~~ proximal part of Carminatives rising up to the upper part of the stomach gives a sensation there that is able to open it.

2. Saline Acids or Neutrals.

Acids. — That these do Stimulate and excite the appetite.

appetite, I have said and know from experience, and also that this may be universal with regard to every Acid, but only safely obtained by such as are incapable of fermentation. Upon this account then the stimulating effects of Acids has been especially sought for in the fossil-acids. We mostly employ Nitric Acid for this purpose, and in the form of Spirit Nitric, in which it is combined with a certain quantity of Aromatic. But I say it is Acid alone which has the useful effects, and that the Aromatic is not necessary to render the Acid either more agreeable or more effectual. I have therefore frequently given Spiritus Nitrici alone, and obtained the good effects produced by the Spirit Nitric.

The other Fossil Acid is Muriatic Acid. This was much employed formerly, but not much now. We are not however confined to Fossil Acids alone, for nothing answers better than distilled Vegetable Acid, and it is upon this foundation that Sour water has been found useful; yet its use is limited, and is expressly to cases of Dyspepsia, and has performed no other extraordinary cures but in cases of Dyspepsia and diseases.

diseases depending upon Dyspepsia. It acts by operating directly on the stomach, and does this by virtue of its impregnation with vegetable distilled acid.

An ingenious Gentleman, some years ago, treated always our Tar by distillation, and got much Acid. As I find it not possible to get Acid alone from Tar without a disagreeable Empyrcuma, I have distilled the wood itself and only pushed it so far as to get the Acid alone. This I have employed, and find it to have all the effects I have found from Tar unaltered.

I believe all Neutral Salts stimulate the stomach, & excite its action, but this belongs more especially to Neutrals formed of the Mariatic Acid. There is some reason then to presume that this neutral (viz. Salt) is a stimulus intended by nature; for we find no nation that can dispense with its use, and the whole of this is confirmed by the use of the Tinct. Spermætoræ Maris. It was originally prepared by Mariatic Acid and Salt of Tartar with the addition of Tincture of Roses, which proved highly beneficial in Dyspepsia. This is to be found in Hoffman's Chemica. Hoffman is of opinion that the

the Volatile Alkali might be used instead of the Fixed.

Whether do acids as possessed of a sedative power, though in the mean time they usually act as Stimuli, whether, I say, by their long continued use can they be of any harm?

I think they may destroy the tone of the Stomach which they were intended to restore, yet, I have not had experience to find they have this effect; but I reason a priori that there are no medicines whatever but by a long continued use may produce bad effects, and directly contrary to what they were intended.

B. Three Medicines giving permanent effects in supporting the tone of the Stomach, under the title of Tonics.

These I reduce to Bitters and Chalybeates.

Bitters comprehend many varieties of Medicines. In Gentian we have seemingly a simple bitter. In Orange peel we have a bitter combined with an Aromatic. In Bark we have a Bitter combined with an Aromatic & Astringent &c. I cannot however give a reason for their different effects.

M. H.

Dyspepsia

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With regard to Gentian, the simple bitter, its operation is not clear. It may perhaps be considered as a Stimulus. I say *may* knows pretty certainly, that Bitters act as Tonics and strengtheners.

But if it is actually true that Bitters are more effectual in the cures of Intermittents when they are combined with Astringents, it will seem that same combination is equally suited in acting upon the Stomach; and therefore Bark, which has this combination, must act better than the others upon the Stomach. I must likewise say it is in some measure doubtful because we do not know in practice the virtues of bitters properly because we use them in such small doses. Jesuits Bean is the strongest Bitter we have, and is for a dose only a few grains. The Columbian Root likewise is a very strong bitter. The handling of the Jesuits Bean is dangerous because in a larger dose it appears a considerable poison. Even the common bitters may prove poisonous to certain Animals. It is ~~not~~ very probable that Bitters, whether they act as Stimuli, Tonics, or Narcotics, by a long continued use and larger doses, may prove hurtful to the System and destroy that tone of

* The Arabians have much complained of its
dangerous effects, and I, expecting this, have
found it a weak medicine.

of the Stomach they were meant to restore,
Chalybeates.

Iron is a metal possessed of Tonic powers as most other metallics are, and has this advantage that it is without the narcotic astringency of Gold and without the strongly Irritic stimulus of Copper, and therefore is a tonic we can safely handle, but I will say however that upon this consideration it is but a weak medicine. +

It was disposed to give the preference to any form of Chalybeates it would be to that in the form of Mineral Waters, as in these the cold is a tonic to the System, and water by filling the vessels does excite this action, and in consequence thereof the action of the Stomach. —

We have several Chalybeate waters in this country of equal efficacy to the foreign waters; and I imagine our Hartfield Spa water is as strong an impregnation of the Chalybeate as any of the foreign waters. It is equally strong & discovers its salutary effects by practice. It has too this advantage that it preserves its effects by keeping much better than the foreign waters. The foreign waters are impregnated with a quantity

quantity of volatile vitriolic Acid and therefore fixed air, which readily escapes. Upon this account they do not keep. The water of this country contains a fixed acid, and therefore keeps better. Whether this is an advantage I will not say, but I think it has as good effects in strengthening the tone of the Stomach as I have ever experienced in foreign waters.

2^d By certain Medicines applied to the whole System.

α. Exercise.

That frequently the action of all our Muscular fibres serves to strengthen such fibres I need not now explain, as it is admitted by every one, and therefore it strengthens the whole System, and the action of the extreme vessels, and produces like effects in the action of the stomach.

From all this it appears that moderate exercise is capable of curing and obviating this disease of the Stomach, for we find that labouring people are free of this disease?

We cannot prescribe a better medicine than frequent walking in cool air. I have frequent

ly

By prescribed the study of Botany for the cure of Dyspepsia. I have known some cured by the habit of the overlooking of a farm, for the constant attention of mind is of use, and as it leads us to be in frequent motion and in cool fresh air it is of considerable use.

With regard to the exercises we naturally take, if they are constant and without violence, they are of use; but if violent and temporary they are of no use. In this respect the game of Cricket is of little use, but Golf is of much more use.

Various modes of Yestation are of great use; but particularly riding on horseback. This has many singular advantages, for it is in a free air and has bodily exercise joined with it, and it occupies the mind, which three advantages are not in a carriage.

3. Another means of strengthening the system is by the Application of Cold. I have before shown cool air to be necessary to the Animal Economy, and therefore it is that Exercise in cool, and even in cold, air, is so useful. I formerly said that Exercise even in cold weather, excites the action of the ex-

treme

extreme vessels, and produces Perspiration. Shutting one's self up in warm chambers strengthens the disease, and this I should before have mentioned as a remote cause.

I would join the use of Cold Drink. When the Stomach is not liable to Spasmodic Symptoms Cold drink is very useful; but when it has, Spasmodic Symptoms it is to be sure often relieved by warm drink, and is then so delicate that it will not bear the contact of any cold; but generally though warm drink relieves the present pains, it has the effect of relaxing and generally increasing the general weakness. —

Cold Bathing is the best application of Cold. It excites the action of the extreme vessels.

This then finishes the treatment of Dyspepsia.

But perhaps two other things might be expected from me.

1. That I did not notice the several cases of Sympathic Dyspepsia, and what diversity of practice there might require. But this would be mentioning all the several diseases. Of these diseases I have in a great measure already treated, as the Gout, Amenorrhoea &c, and shall

soon treat of the others, as chlorosis, Epilepsy, &c.

2. That I should have made mention not only of the more constant and essential symptoms, but of the several symptoms that are ~~also~~ accidental to this disease, as Scurvy, Asthma &c.; but I say these are only concurrences of other diseases, of which Dyspepsia is rather a symptom than a cause.

But there are certain symptoms of Dyspepsia besides what we have spoken of, which may require a cure different to what we have laid down, and these I shall now touch.

With regard to the first symptom, *Anorexia*; this requires no particular treatment but is cured by Vomits, Laxatives, Aromatics, Bitters, or exercise.

With regard to Nausea and Vomitus, if they are habitual symptoms and frequently recurring, only in a moderate degree, the cure is the same, as for the whole disease; but, when these symptoms are very violent they may require particular Medicines; when they are owing to a Spasmodic affection they require Aromatics, but generally Opium is the medicine for this case.

(To)

The Flatulency, Nuctus, & Eructatio are only to be obviated by general means of Cure; and when very violent they are to be relieved by Cassminatives.

The Cardialgia, when it depends upon a prevalent acidity, is to be cured by Absorbents and Aromatics, as formerly explained. I forgot however in that view to mention a Medicine with which it is frequently cured, viz. Demulcents. I have found Extract of Licorice a Cure for it, and I think this can operate only as a Demulcent. Whether its mucilaginous quality, when taken down, inviscates the Acidity I leave you to determine. A very frequent Medicine is the use of Milk. This, however liable to become acid, as to its effect inviscates and covers that Acid.

Gastrodynia. I have said that this is a spasmodic affection, and therefore to be cured by Aromatics or Opiales. Now Aromatics or other stimuli, in exciting the action of the stomach, have the power of taking off Spasm from particular parts of it I cannot explain. Aromatics as being general stimuli of the stomach will often remove Gastrodynia depending on Spasm. Often

Dyspepsia

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Often we depend on Opium.

Among the medicines too the general rules of medicine may be admitted. The chief are Volatile Alkali, Ether, & Marsh. All of these have been on occasion found useful, and all are useful as Expectoratives. Opium however is much more powerful than any of these.

Brandy too, which is a medicine in which stimulating and narcotic effects are combined, is very useful. It is however extremely liable to become habitual, and to excite an inclination to take it when the symptoms do not require it.

Both Opium & Brandy must in time wear out the force of the stomach, and however necessary on certain occasions they may be, yet by a long continued use of them they are very pernicious.

The Mucus Nictica I need not now mention, as I have before spoken of abating it so fully.

Hypochondriasis
C

Hypochondriasis.

In a course of Clinical Lectures formerly, and a course of Practice I lately delivered, I gave most of the doctrine; I have now given under Dyspepsia, under Hypochondriasis.

I have reformed the form of this character by saying "in temperamento melancholicô." - With regard to the character of this I have commented at large on it in Dyspepsia.

The languor, torpor, molles, & ~~molitia~~ *molitia* I took in one view as expressions of the mind: They might have been included in Dyspepsia, but I reserved them to be noticed here. They might lead us into a very curious and too subtle an enquiry in considering the connection of the body and mind, and their influence on one another.

With regard to this subject also I have to say can be done very shortly. From every view of the animal body there appears a tone of body and mind that depends on each other, and mutually produce each other. To illustrate this I shall quote you a passage

of Shakespear, where he gives, in Julius Caesar, a striking instance of the mutual influence of Mind and Body;—an injury of the body will produce an injury of the Sensorium, and thus in man the greatest hero that ever returned from battle.

This state of the Body distinguishes the Hypochondriasis from the Dyspepsia. In the former there is a rigid fibre and a balance of the circulatory system in favour of the veins. In the latter a sanguineous state prevails. The Hypochondriasis always begins in the Sensorium, and symptoms of the Stomach are affections of that Sensorium. Hence Hypochondriasis exists so commonly in Melancholia, Mania, Apoplexy, and such affections as show an affected state of the Sensorium.

Cure.

1. To avoid Remote Causes; which we first do in Dyspepsia.

These in Dyspepsia are the avoiding intemperance of mind; but in this disease it is with difficulty we can avoid the occupation of the mind, for here the mind is closely attentive to

some particular train of thought, and hence it occurs in people of a Melancholic temperament, and the greatest researches have been made by people of this temperament. Hence we choose to divert the attention from fixed objects. Bodily exercises, tho' applicable in Dyspepsia, are of little use in Hypochondriasis, rather improper, and I have found some of the most miserable objects of Hypochondriasis in persons who have been used to hard labour, and that case, Melancholics in affluence enjoy, contributes to their health. The Narcotics, as tea, coffee, Arama, &c. that enter into our diet, are to be avoided, as they increase the torpor of the System; so also excess of venery &c.

In Hypochondriasis there is no loss of tone in the extreme vessels, but a state of Torpor. In wet and cold seasons they are worse, and hence the benefit of removing them to warm climates, though inhabitants of warm climates are often subject to the worst kind of Hypochondriasis.

2^d Indication. To correct the Symptoms of Indigestion, Acidity, and Costiveness. Hence Vomiting may be useful in exciting the action of the Stomach, and Perspiration, but as Hypochondriasis depends on

Hypochondriasis

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on the state of the Brain these medicines are of less efficacy.

With regard to the cure of Acidity it is the same as in Dyspepsia.

For costiveness the medicines are nearly the same in both Dyspepsia and Hypochondriasis. The greatest instances of costiveness appear in the female sex; and the chief instances of costiveness occur in Hypochondriacs, hence we should particularly attend to this symptom.

So long as the disease has made no considerable progress, and no symptoms of Acidity appear, the fruits and acescent substances prove useful aperients. — Neutral Salts, when the bowels have not lost their tone, will not produce so much flatulence in Hypochondriasis as in Dyspepsia; hence these have been useful in Hypochondriasis.

Soluble Tartar Stedinger is but an indifferent remedy.

3. Indication. This differs from its corresponding one in Dyspepsia. As there is no loss of tone here, the medicines for this, as the Aromatics, Saline, Tonic, Strengtheners, Bitters, and Chalybeates are of very little service. The latter class indeed, Bitters and Chalybeates

Chalybeates, rather do harm; for there is always too great a rigidity and disposition to too much tone, and hence such Medicines must aggravate the disease they were intended to cure. In Dyspepsia I said it was necessary to avoid warm liquors and any thing relaxing the tone of the Stomach; but here, relaxants, external and internal, are remarkably useful.

I know many Hypochondriacs who find relief from warm water. In sanguine temperaments however, and in persons liable to Dyspepsia, I have known it to induce and aggravate the disease.

Exercise and Cold.

So far as Exercise promotes perspiration it is of great service to Hypochondriacs. Sanchorius observed that the tone of the mind depended much on perspiration; that obstruction of perspiration produced Melancholy; hence Gestations, as supporting perspiration, may relieve Hypochondriasis; but this is entirely confined to Gestation, for every bodily exercise increasing the rigidity of the fibres is not admissible.

Cold Bathing has nearly the same effect as this last. I have known people, by practicing this, produce an artificial rigidity of the System. By

Hypochondriasis.

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a long use of it, it emaciates the body. It may however, like Exercise be of service, but in general I believe it is very pernicious in Hypochondriasis.

In this way I think it better to contrast the Management of Dyspepsia and Hypochondriasis in proportion as their causes are different; on which the diversity of cure must depend.

The principal symptom in Hypochondriasis is the Temper of Mind, the Dejection, the low spirits, which is in common to both Hypochondriasis and Dyspepsia, but I reserved it for this place. This we should remove if possible, for it is a law of the Economy that we indulge our present passions, and by this they increase themselves: when therefore such a temper of mind occurs, it should be obviated or diverted.

1st To obviate it. We should, for this purpose, remove the person from all occasional objects of anxiety &c. Hence send such persons travelling and remove them from home.

2^d To divert this state of mind. Instead of leaving the Melancholic to his own state of thinking, we should substitute some new object that
does

does not engage much attention. I have made several tries by engaging such patients to farming, but was chosen in general occupations of the mind, attended with pleasure, e.g. Amusement. — Gaming however is to be avoided, as nothing more enervates the mind than its attention to this sort of subject.

Exercise of the body, as preventing our entering into a train of thought, may be proper; but this was never mentioned as pernicious. Riding on horseback however, because it requires constant attention to the horse and to get out of the way of obstructions, prevents all mental pursuits, and is therefore to be considered as useful. And riding in a single horse-chaise, which the person drives himself, is one of the most useful exercises in this disease.

With this I finish the letter of Hypochondriasis. You may be surprised that I have not taken notice of Dr. Whist on this subject. I must confess I cannot safely recommend him; but I am delicate in citing the work of my late colleague. There is in it want of accuracy & precision and an excessive mix of confusion.

Chlorosis

Chlorosis.

According to the ordinary Ideas conceived of the disease the character in the Synopsis is insufficient for a History. One difficulty may occur, the term "Menstruum æpe retentio", the common Idea would have left out the æpe, as it is founded on the retentio mention. But I could not introduce the Cachexia as a particular Genus, and hence I would make it a species of the Genus here.

The Dyspepsia, the Pulsus Exilis, Asthenia &c, are as constant symptoms of Cachexia as Chlorosis; but I have given the Cachexia as an incipient Anasarca, and ~~as~~ the account of this will come with more propriety in the Anasarca.

The Menstruum retentio confines it to the female sex, but I think I have found it in Boys and young Men. I have known boys eat lime plaster ~~from~~ ^{for} weeks like a green sickly Girl; and the disease in these I do not doubt depends on the same cause as the Chlorosis.

I need not enter here into the Theory of the disease. The principal circumstance is a want of
red

red blood in the system, and by this we explain the Anasarca symptoms that occur. From an want of red globules & lymph the fluids are allowed to run off through the exhalant vessels. This cannot be imputed to the Aliment, for the Aliment before this came on was suitable enough. It must be imputed to the chylopoietic viscera or perhaps the Hematopoietic functions if any such as these last exist. These last we do not understand, but the fault of the chylopoietic viscera is sufficiently evident. We therefore find the disease at last return to Dyspepsia, and trace it to a degree of Atony in the uterus. This is all I think necessary. The

Cure

I have sufficiently delivered in the Amenorrhœa.



Order III.

Spasmi.

Spasmi.

By extending this term to comprehend the whole of the irregular actions of the Muscles, is improper. The character we have given is "*Musculorum vel Fibrarum muscularium motus abnormes.*"

It has been commonly confined to what we call, Muscles, and those of voluntary motion. But it should be extended to every muscle. The fibres of some vessels and the orifices of ducts are so inconsiderable as not to be so obvious.

Wagel, seeing the impropriety of Sauvages's limitation, says "*Solidarum mobilitas.*" But this is needless as the *Solida Mobilia* are only muscular fibres. In Sauvages it is "*Contractio contractans vel interpolata.*" Wagel into "*Contractiones et agitationes.*" but this is too vague, we should be more specific, under the term *abnormes*, I mean every variation whether as to the mode of action or the effect produced by it.

The term is more strictly applicable as specifying

Spasmi

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ing the peculiar modes of contraction. Thus as most muscles are excited by the will, yet it is with a determinate degree of velocity, and, if excited by the same power with a greater, we call it convulsive. The same is to be applied to the degree of force, time of contraction, and the state of alternate contraction and relaxation. It is considered as a morbid case when the contraction is attended with different effects from usual; thus, in an inversion of the Peristaltic motion; when ever this motion forces open the valves of the Stomach, the orifices of the Cardia &c, this perversion is called *involus abnormalis*.

Muscular contractions do not remain long in that state, but they are alternated with relaxation, and the power of the will ceasing, merely the action of the Antagonists will bring it to its former state. But when this is more violent, in degree, so as spontaneously to fall into the state of relaxation, or brought into it by the Antagonists, this is what we call a spasm. - The best of these irregular motions are called *convulsive*. This distinction is evident, and most pathologists have made it - they have distinguished the *Tonici* and *Convulsi*

Tonici.

Avicenna and Linnaeus have made use of this distinction for subdividing their class into two orders. There are indeed motus abnormal, that are separate, but others have Convulsion and Spasm mixed together.

I have found another division necessary, according to the several functions which these occupy, viz, Animal, Vital, and Natural.

The Motus Abnormal, as occurring in Organs of voluntary motion, comprehend three genera.

1. Tetanus.
2. Convulsio.
3. Epilepsia.

These depend on some law of the Animal Economy that may apply to them all. I shall first begin with Epilepsia, as it comprehends the convulsive motions in general.

Epilepsia
3

Epilepsia.

In entering upon this I must give some Theoretical Idea, which however shall be simple.

1. I suppose it demonstrated that Muscular contraction depends on a *vis Nerva*; that it some times may be excited by applications to the *vis Insula*, but depends on the *vis Nerva*.

2. That the *vis Nerva* depends on a certain power, energy, or action of the brain. This term I employ as the Brain is evidently active, as the action produced is much greater than the impression made on the sentient nerves, and every impression is modified in the Brain to produce particular actions.

With respect to the several parts of the body, the action of the brain is separately exerted, and it is determined by a certain measure of force, velocity &c. I shall not enter into the subtle enquiry whether the Soul can produce more than one action at a time. But I only say the action of the Brain is separately exerted.

Epilepsy is when the action of the Brain is involuntary.

involuntary, when it is exerted with a free preter-naturalism. As to the particular constitution of the Brain that fits it for this particular action, or as to the peculiarity of constitution that makes certain brains liable to this condition of it, or what is more nearly the proximate cause of Epilepsy I pass over. All that is necessary is to enquire into the general causes producing this action of the brain. — We shall consider the

Remote Causes,

as they are Occasional and Predisponent. The foundation of this division is obvious to any one acquainted with Epilepsy. Where its causes are not obvious we must refer it to a predisposition. But this is not always a proper division. There are many Remote Causes neither Occasional nor Predisponent. If a sharp Instrument comes in contact with the Brain it will excite Epilepsy. —

We shall consider them however under this view. The Sensorium commune is under different conditions with respect to its ~~state~~ ^{activity}, and ~~for~~ ^{for} action; and such ~~state~~ ^{activity} makes the principal difference between Life and Death. In waking and sleep we perceive the Brain in different conditions respecting action; and

and these conditions we have called Excitement and Collapse.

The Occasional causes act either by increasing the excited state in the Brain or act by inducing collapse. Tho' the action of the Brain necessarily implies its excited state, yet this action may arise from a previous state of collapse, so that the action of the Brain may be excited by causes inducing collapse.

Occasional causes are

I. Those that act on the Brain by increasing its excitement. These I subdivide into two,

1. Those affecting the Brain itself.
2. Those affecting the Brain in consequence of being applied to other parts of the system.

1. Those affecting the Brain itself.

These are a. Mechanical Acrids.

b. Chemical Acrids.

c. Mental Irritations.

d. Irritations arising from distension of the vessels of the Brain.

a. Mechanical Acrids I consider as
 are sharp pointed bodies. — These are

a. all

Epilepsia

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a. All sorts of wounding Instruments.
b. Splintered bones from a fractured skull.
c. Exostosis in the Internal surface of the Cranium, or excrescences of the Meninges of a sharp pointed figure. — Whether these act on the Membranes or Cortical substance of the Brain, or only on the Medullary is of little importance.

b. Chemical Acrids. This is an Acrid matter generated in the system, as the matter of Abscesses & Effusions in the Brain. These have been formed in Epilepsies and these have occasioned the previous head act. But I think it is more probable that the Inflammation and increased Impetus giving occasion to such Abscesses or Effusions are more commonly the cause of Epilepsy than such Acrid matter commonly produced. However the dispute is of no great consequence as the case is generally incurable.

c. Certain Mental Irritations. It is now admitted that our will acts directly on the Brain; that the whole of our intellectual functions are connected with a Sensorium Commune. I consider therefore Mental Irritations as belonging to this set of causes, acting directly on the brain. These might be considered respecting their acting by facilitation or (all the)

With regard to the Passions of the Mind they may be considered as acting on the Nervous System, with little effect on the Sanguiferous System. Yet few are confined to the Nervous System, and many of their effects are produced merely from the intervention of the Sanguiferous System from causes first acting on that System.

It is probable, Anger produces Epilepsy by the Intervention of the Sanguiferous System. — Under this head may be mentioned the imitation of Epileptics, or the sudden communication of the disease merely from seeing a person labouring under the disease. We know Horror will excite Epilepsy, and to this the Phenomenon has been referred. But this does not operate alone, we have many instances of the communication of convulsive motions that are not objects of horror, such as ridiculous gesticulations. Man is Ζῷον Μιμητικόν, according to Aristotle.

This power of Imitation is to be considered as influencing our practices. To produce motions in the body it is enough that the idea be conceived in the Mind. When Epilepsy has been produced by any Motion, it is not necessary to have the original exciting

exciting object present, merely revising it in the idea will produce the effect. We know the power of Association, whereby certain motions being once present together, constantly succeed each other, and are always present together in the mind. I know a Lady with child, who, being obliged to stand some time to have a gown tried on, became sick and vomited. The Mantua maker returned next day and had hardly begun when she came sick and vomiting returned, without the Lady's being obliged to stand. It afterwards occurred immediately upon the sight of the gown in a closet.

Wen Chrieten mentions a boy becoming Epileptic by a great dog's leaping upon him, and afterwards merely the sight of a Dog brought on the fit.

d. Those operating by producing unusual distension in the vessels of the Brain. - This deserves our particular attention.

From many dissections we find Epileptics to have been affected with considerable congestions of the vessels of the Brain. For these I refer you to Leicaud, Book 3. Cases 173, 236, 243, 272, 280, 301, and 401.

In his 2nd Case we see a considerable obstruction

obstruction in the Jugulars subsisting a long time. In Case 301, we find a person liable to a Hemorrhage of the Nose before the occurrence of Epilepsy.

What is the nature of the Epilepsia simulata, or the feigned Epilepsy, for some people have the power of bringing the fit actually upon them? Whether these motions are entirely under the conduct of the will of the person is difficult to say. Many have ~~been~~ born to the most violent impressions, even the actual cauterization, which has been employed to detect them. I think it is to be explained by the power of imagination, that being struck at the appearance of an Epileptic they are seized with the disease, and the idea of the object recurring will occasion the renewal of the fit.

To reflect on the dangers that have passed, or renew the image of certain passed situations, renews the same feelings that occurred on the first impression.

Phrenitis, which depends on an Inflammation of the Brain, is frequently accompanied with Epilepsy, and serous effusions too are often found in Epileptic Brains. Effusions we know are Hemorrhagic or Hydroptic. In the latter we cannot infer a

a previous congestion of blood, but in all the others it is clearly evident.

Another proof that Epilepsy often depends on a sanguine congestion, is because it is frequently the sequel of head ach, mania, palsy, & apoplexy, which are founded on congestions in the brain, and we find in fact every occasional cause of Turgescence is an occasional cause of Epilepsy. Thus Anger, by urging the blood to the brain, produces Epilepsy. The heat of the Sun or of a warm chamber will have the same effect; and surfeit, intoxication, and other causes produce Turgescence in the vessels of the head.

Another Occasional Cause depends on certain circumstances in the state of the heavenly bodies, for some Epileptics are liable to their fit at certain states of the Moon; at the swelling of the tides. I am at a loss how to explain this, and think Dr. Mead's Theory of it is not well founded. There is a presumption that they often operate by occasioning this Turgescence in the vessels of the head. How does the distension operate in producing Epilepsy?

The tension of the vessels of the Brain is the chief means of it's Excitement, and how far an
increased

increased tension may give this excited state in which Epilepsy consists, I do not pretend to determine; the fact is sufficient for our purpose.

2. Those causes operating on other parts of the Body thereby affecting the Brain.

All strong sensations, whether depending on Idiosyncrasy of the persons, or from whatever cause, are causes of Epilepsy, but more especially they produce exquisite pleasure or excite pain.

Sensations that do not depend on the force of Impression, but on other qualities as figure, colour, &c. do not produce Epilepsy. It is the sensation depending on their Intensity, and with great degrees of force, as strong light, pungent odours & strong tastes &c. have proved causes of Epilepsy, and all causes of acute pain may be causes of Epilepsy, as these are the strongest sensations. All sudden and unforeseen sensations, when very strong, more especially produce Epilepsy.

The action of the Brain respecting the force it exerts and the velocity of its action, the order of succession with which it acts, and the velocity of succession, in all these cases the brain admits of considerable latitude; but this latitude has its limits

limits. If the will offers to perform actions with unusual velocity it loses its command, its motions become confused and irregular. It is easy to apply this to other impressions, whenever such excite the action of the brain very strongly it may produce excitement or collapse in excess.

The impression of titillation has a peculiar influence in this respect. Impressions that produce Oscillations are noted for producing convulsive motions, sometimes of the pleasant, sometimes of the painful kind. This has been referred to the power of pleasure in producing Epilepsy, but if so it does it by the same principles.

There are certain impressions whose operations are obscure because they are not attended with sensations of consciousness; such as calculi. In a case I treated a patient with Epilepsy was discovered, showing no morbid symptom, except a stone in the kidney that gave him no pain. Han Swedenborg alleges for this, that it might be an accidental concurrence; for we see people labouring under Epilepsy from no evident causes. He mentions a patient Epileptic owing to a calculus; who, on voiding the calculus, was freed from the disease.

Another

Another case is Worms. These give no previous Indication of their existence, but these I have known produce Epilepsy. — To these I would join the cases of Acrimony in different parts of the body, in Ulcers &c. Acidities in the Primæ viæ may produce Epilepsy and many such causes may occur that we cannot ascertain. — It is probable many of these act as Acrimonies, and operate as direct stimuli; but many act as Sedatives by inducing Collapse, and this we shall see more clearly when we consider the causes operating by Collapse.

Cases of suppressed Secretions, repelled Eruptions, dried up Ulcers have been causes of Epilepsy. The suppressed Secretion, where it is a flux of blood, as the Menses, Hemorrhoids &c, may produce a determination to the brain, in consequence of the Plethora, and occasion Turgescence. In dried up ulcers, if they exhaust the coagulable Lymph, such a discharge suppressed may occasion Plethora & occasion a determination to the Brain; so that both these cases might have been referred to the head of over disposition.

But repelled Eruptions &c must be referred to
acrimony

acrimony as a direct stimulus thrown upon the system, and a common effect of these matters thrown upon the blood is to produce Dropsy. But neither the Effluvia state nor sedative powers are so necessary in producing the Atony in the exhalants. It is enough if we say, in Epilepsy, that these discharges become necessary to the balance of the system, and therefore, by their ceasing of their action, the Atony formerly in these parts was communicated to the brain and produces Epilepsy.

II. Causes that act by inducing Collapse.

1. Hemorrhage. All excessive Hemorrhages produce Epilepsy; which I think is not to be explained but by saying a considerable degree of Collapse is produced which causes Epilepsy. — All causes producing Syncope, by operating on the Brain, and thereby on the Heart, are causes of Epilepsy. This gives occasion to a serious question, why the same powers of Collapse will sometimes produce this reaction, at other times not? This I cannot explain. It is, however, a fact.

2. Fear or Terror. Pissions arise from an object of immediate and great evil suddenly presented.

presented to us. If to any one there is any difficulty of applying this to the explanation of Epilepsy, I would only tell such person that every cause of uncertainty gives fear, and that all unusual objects are objects of uncertainty, and thereby give fear, but more so if they are large in bulk, indense in force &c, which presented.

Almost every man, on the sudden explosion of a cannon, if unforeseen, is startled; but in persons of extreme sensation, even the falling of a packer may have the same effect. We are not to enter into any Theory on the operation of Fear; but fear according to its kind & degree operates differently. Fear sometimes has the power of obviating convulsive motions, thus Riccaugh is frequently cured by Fear, and there are instances of its curing Intermittent fever. But its sedative power is more evident when in a higher degree, as in Palsy, Syncope &c. Fear when it produces a reaction causes Tremor, Convulsion, and Epilepsy. Its operation as we have just considered seems purely on the Nervous System. But tho' it acts on the Nervous, it acts likewise on the Languiferous System. For it may occasion stagnation & congestion in

in particular parts of the Sanguiferous System; thus we can frequently account for Fever, producing Palsy, Apoplexy, and sometimes Epilepsy, and it does it in consequence of its producing a largeness in the vessels. I shall give you an instance in proof of this; a man in a shipwreck, escaped with the greatest difficulty, and it had the effect of causing Epilepsy. This had continued two years and had been tried to be cured two years by every specific known. I found it accompanied with particular circumstances, for while the fit had the interval of three or four weeks its coming on was clear to himself, and was preceded by Head ach, swelling of the Adnata &c. There were evidently symptoms of a plethoric state of the brain, and by endeavouring to diminish this by low diet, bleeding &c. the fits suffered an interruption for several months, when, perhaps by some irregularity of his diet, they returned. His brother, who was a Surgeon, coming from abroad at this time, thought proper to take him under his own care, and, being himself persuaded of my judgement's being proper with regard to the present case, he led him several times to a deliquium animi, by which means

means the disease was cured. It appears therefore from this that Epilepsy is often a peculiar congestion of the Brain, and to be cured by evacuations &c.

The Power of the Imagination operates too in renewing Epileptic fits, and explains why Epilepsy, when liable to become habitual, becomes extremely difficult of cure from the vast difficulty of stopping the working of our Imagination.

To Terror I join those causes operating by a horror, of which I need not give particular instances. They are not to be referred to any Sedative power, but to a peculiar Idiosyncrasy. In many persons they cause Syncope, but if they are sufficient to produce a reaction they will cause Hysteria or Epilepsy. I do not know if any power is so disagreeable and so constant as a luxury to produce the same effect unless it be the very high odour of Animal Putrefaction.

We know of many Nauseous Tastes, yet very few of them produce Hysteria or Epilepsy; but though that sensibility is not in the Tongue, yet the Stomach possesses much sense, and therefore such a variety of substances thrown into the Stomach

Stomach produces not only nausea & vomiting but Epilepsy. We had an Apothecary in this town, whose wife could not remain in any part of the shop while *Speaccaantha* was powdering, without being affected by an Asthmatic fit. I will not enter into any Theory, but I think these operate by producing an Atony that is communicated to the *Sensorium* which produces Epilepsy. Several of these poisons may operate as directly stimulants, and, we may say, by inflammatory powers; but most of them are perhaps of a sedative and narcotic quality, and it is as such that they are generally supposed to produce Epilepsy.

A singular circumstance attends the operation of many of them, viz, the *Aura Epileptica*, which is when Epilepsy discovers an uncertain mode of uneasiness appearing in some part of the body, and the sensation arises along the course of the limb towards the head, and the persons can hardly perceive their approach without being seized with stupor and epilepsy. This accompanies the approach of a great many Epilepsies. Its theory is difficult, but there are two curious questions relating to it. —

1. Whether this is always a proof that Epilepsy is Sympathic, and whether it is always produced by some organic affection of the part from whence this proceeds?

Facts unite in making it Sympathic.

2. Is it to be considered operating as a Stimulus, or does it not sometimes operate by a Sedative power?

We have not much assistance from the nature of these powers operating to determine this question. If we consider that in all these cases, and particularly in Symptoms of Hysteria, where the first Symptoms of the disorder begin in the left flexure of the Colon, it rises up to the Stomach, and at length affects the Brain and brings on Convulsive motions, I therefore think that these operate oftener by a Sedative than a Stimulant power.

One cause still remains, viz. the supposed cases of a Compression of the Brain.

If we consider how often Epilepsy is combined with Palsy and Apoplexy, sometimes preceding them, sometimes supervening on Palsy, and that it appears by Dissection, we cannot doubt of it. But in cases where Apoplexy or Palsy succeeds to Epilepsy I have

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no doubt but that the original disease depends on a Congestion in the vessels of the Brain, and the frequent repetition of the operation of such causes may produce the affusion so frequently the cause of Palsy and Aphosia.

Suppose Epilepsy not to depend on Congestion of the vessels, but on causes operating by collapse; such causes may give the permanent degree that occurs in Palsy, and as we see the repetition of Epilepsy produces the weakness of the Brain attended with a loss of the intellect, there is no doubt but the repetition of Epilepsy may produce such a state of collapse as may produce Palsy.

From Palsy then there is no proof that Epilepsy depends on Congestion; but, when Epilepsy succeeds Palsy, there is not much doubt but that the compression which produced that disease had a share in producing Epilepsy.

In the whole history of Epilepsy I do not find any cases of Collapse producing Epilepsy but such as are remarkably sudden. — ^{The conclusion then is that,} Where there is an original Compression of the brain, it never simply produces Epilepsy, but gives occasion to the Congestion on which Epilepsy depends. (Predisponent)

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Predisponent Causes.

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I have observed that the influence of these causes is no where more evident than in Epilepsy, and though we speak of these causes as a part of the Remote Causes, yet they also become a part of the Proximate Cause. Upon this subject some Theory is absolutely unavoidable, and I shall offer it to you as so many propositions supported upon facts.

Prop. 1. The predisponent cause consists in a mobility of the Brain or Sensorium.

Such a case of Mobility evidently exists, which we conclude from observing such a mobility evidently in the state of the mind. A person is readily elated with hope or depressed with Fear, very easily prone to Anger and Joy, and the transitions are sudden, and slight causes in the same temperament produce strong impressions, we have no difficulty in observing a mobility of the mind. Where Epilepsy depends on predisponent causes (for it does not always, it sometimes depending on Synchrony) it is absolutely the case of Mobility. There are two cases which directly apply to our purposes.

1. The

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1. We find that it depends upon mobility; thus children, people of delicate habits, and those from long diseases are often subjects of Epilepsy. The effects of debility, I would illustrate.

The Brain may be considered as an Elastic; (An Elastic Chord, for instance.) Flexibility implies that by small force the Chord may be bended to a considerable degree, and the Oscillations of Elastics are to the degree they are bended, and in many cases of the Animal Economy the effect is more to the extent than the force of Oscillations. The mobility depends much on the original stamina of the System. It may be much increased by habit, and all its active powers may be increased in facility and force merely by repetition; and from this we understand why Epileptic fits become more and more difficultly removed, and why when we cannot readily remove the cause we ought at least to prevent the repetition of the fits.

2. That Mobility depends commonly upon a plethoric state of the System.

I think it will appear that the plethoric state presumes a certain excess of facility. But in many cases Debility itself would have had little effect, the

the plethoric state bringing it into action, and the tone depends more on the degree of tension given than the natural force of contractility that is in their fibres. In plethoric persons that tension is given, and undoubtedly the tone of the whole depends upon it. It is therefore over distension that gives occasion to the mobility. As the tone of the vessels depends upon tension and this tension depends upon the quantity and impetus of the fluids which is liable to be and is easily changed there fore the mobility is different according to different states of it.

To apply the whole of this to our present subject it is enough to say that while the plethoric state favours those congestions of the brain that are frequently the cause of Epilepsy, so it most frequently renders it to prompt changes considering what circumstances that depends upon. From these considerations I hope we shall be able to lay down some general Indications of Cure to which we now proceed.

Cure.

I have just said that the predisponent cause are part of the proximate, & we find some Indications

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1/15

Indications in the predisposition. When we do not know the ^{primary} cause of the Epilepsy has, by all Systematics, been considered as Idiopathic or Sympathic, i.e., as depending on an affection of the Brain, or of other parts of the System. I own the application of this is attended with considerable difficulty. Perhaps there are affections of the Brain that may be considered on the same footing as Sympathic Epilepsy in other parts of the Body; and, whenever the Sympathics are without predisposition, it is sufficiently plain the cure does not fall under our consideration here, but must turn on the cure of the original disease.

In Epilepsy attended with the perception of the Aura Epileptica, which Sauvages distinguishes by the title of the Epileptica Sympathica, and says it may occur from an original affection of the brain, it suggests these three measures.

1st To destroy the topical affection we may suppose to be constantly present. We have found a cure by destroying the part by the actual cautery, by Issues &c. —

2^d When the topical affection is unknown, or when it resists the last measures to cut through
the

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the nerve forming the communication between the part and the Sensorium.

3^d To interrupt the propagation of it by a Ligature.

There are many instances where the pulling of the greater light nerve the power has intercepted it and the same at the Isthm. It is very probable that any considerable impression applied to such Nerves renders them less fit to communicate.

I now proceed to the Cure of the Idiopathic Epilepsy.

Many of these do not fall under the power of our Art or our consideration, as these depend upon Remote Causes as Splintered Bones &c. Epilepsia too depending upon topical affections of the Brain are mostly incurable and so not belong to the general cure of Epilepsy. Epilepsy too from Irritation of various parts of the System does not fall under our consideration.

We are here to consider the removal of the Proximate Cause of Epilepsy. which we have said is to be done by taking off or removing the predisponent causes.

The taking off the predisponent causes is

+ 2^d B, taking off the predisposition.

This part

is to be done —

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is to be done, 1.st By avoiding the occasional causes +

1. By abating & taking off the plethoric state and preventing its return.

2. By the general means of curing the mobility of the system, either by removing its causes, or abating its effects.

1. By avoiding occasional causes.

We must then avoid rarefaction, increased impetus &c, and therefore the Sun, warm bath, warm chamber, violent exercise, anger, surfeit, intoxication &c which give an accumulation of blood in the vessels of the head, are to be avoided.

When it is referred to mobility we have also an opportunity of avoiding occasional causes; as for instance I know a boy was always thrown into an Epileptic fit upon hearing the ringing of a bell. He was therefore removed into the country and by this means cured. It is therefore of great consequence to study these occasional causes.

2. To take off the predisposition.

1.st By abating or taking off the Plethoric state.

After what I formerly said on this subject relating to Hemorrhage, much is not now necessary.

necessary. The only powerful and sudden means of taking off the Plethoric state is by Bleeding, which here is commonly required to be very large. Leeches applied to the Temples in great number; and, when it can be practiced, cupping and Scarifying will very often be of great service.

To diminish the present Plethora, to evacuate the System, I own Purging may be employed. It would not however be so useful if it did not operate as a particular revulsion from the vessels of the head.

But Bleeding, tho' it takes off the present Plethora, does not obviate the return of Plethora, but rather favours it. To obviate the return of Plethora we must depend upon Abstinence and Abstinence, and by the concurrent judgement of Physicians more Epilepsies are cured by Abstinence than by any other means.

One other means to be observed is Issues. — If the fluid evacuated by Issues is Glen, which supports the fullness, the evacuation of this must diminish the quantity of fluids in the larger vessels. But probably they operate in another way; for, while these Issues are kept open the languor

turgescence is prevented falling upon any particular part of the System. This leads us to the consideration of the proper place for Issues. In so far as Issues are intended to answer the first Indication it does not signify in what place they are in; but when they are intended to answer the second intention, the nearer they are made to the head the greater service they will be of.

I might speak of the cure of Epilepsy by Specifics, which has been attempted, but I know of none such in Medicine.

2. To take off the mobility of the System by removing its causes, or to obviate its effects. — The causes we can most distinctly perceive are Plethora and Debility.

With regard to the plethoric state I have already sufficiently spoke. With regard to debility we are to correct it by Exercise, cool air, and by tonic and astringent medicines, which I have before spoke of. All these however are medicines employed to increase the tone of the solids; but the strength of the system may be increased while the tone is the same, by increasing the tension of it.

I have said that there is Epilepsy from Irritation.

To obviate this a nourishing Diet is necessary. This however requires caution, for the state of Debility is often joined with Plethora; for we find those degrees of fullness which in the strong would not constitute plethora, yet in the weak would give all the consequences of that state.

Our solids contract to the bulk of the fluids. We had at this place, some years ago, a Student, liable to Epilepsy which we had reason to believe came on in consequence of a plethoric state, for which I ordered a vegetable Diet and forbade the use of wine, yet the Epilepsy was not in the least mended. The Gentleman, in the vacation, went home; where his friends, thinking he lived too low, advised him to live better, and being prevailed upon by their persuasions he eat whatever he chose. By this means his Epilepsy was entirely removed, and there was no doubt but here a full diet proved a cure to him.

I had likewise lately a patient in the Infirmary, who seemed to me to be able to bear Bleeding and Purgings, and by those Medicines I thought to have attempted his cure. Finding however he could not bear these, he was treated by a tonic Medicine.

Medicine, viz, *Super: Ammoniacal*; by which he was cured.

When Epilepsy depends on debility, the cure is,

1. To remove the debility.
2. To obliterate its effects.

For this we use Tonics, as Teas, Cold Bathing; and by Astringents.

Fear cures convulsive disorders, and is a Tonic. How it operates I am uncertain, and its application is uncertain, as none of the passions can be properly employed as a remedy.

Of the vegetable Astringents the *Mistletoe* has been esteemed specific; but its virtues are merely Astringent. It may have been of use but I never perceived its efficacy, and I apprehend Superstition, more than its qualities, first introduced it.

The more powerful remedies are the proper Tonics Bitters and Bark. Bitters I know nothing of in Epilepsy. The Bark is very excellent. The *Folia Aurantiæ* has been recommended, but the Bark alone is very powerful. I have known it especially useful when the disease is periodical, because we can give it nearer to the approach of the fit, and hence its use in Intermittents. While there

There have been disputes about the operation of the Bark, in other diseases, as Tonic or Antiseptic; in Epilepsy I think there is no foundation for its acting as An Antiseptic, as there are no symptoms of Putrescency, and it must operate as a Tonic here on the Nervous System.

As Epilepsy depends so often on Plethora and that a Hemorrhagic one, sometimes the Inflammatory, in these views the propriety of the Bark may be questioned. The administration ought to be with this caution, when the plethoric state is considerable, it is not admissible, and only when the plethora is inconsiderable.

The next set of Tonics are the Mercurials. Most of these however are so stimulant that they cannot be used with safety. - Tin has been used for Epilepsy, but its poisonous effects have deterred Physicians from the use of it.

Iron is a safer remedy, and has been employed in a variety of Epileptic cases. But these we cannot trust much to, and we have recourse to Copper. Van Swieten mentions a medicine, a preparation of Copper, that cured Epilepsy without bad effects such as Vomiting or Purging. The intention is to obtain

obtain the tonic, without the Stimulant power of
Copper, and use take it in as small a dose as
possible. The Cuprum Ammoniacale is Copper
joined to an Ammoniacal Salt; it is prepared from
the blue vitriol by adding the Sal Ammoniac ^{which}
meanwhile produces a decomposition of the Acid and the
Copper separates. But I have cured an Epilepsy by
the use of vitriol alone, so that the effects of the
Ammoniac are uncertain.

Cold Bathing is to be used as a powerful
tonic. This is not applied with safety till measures
are taken to diminish the plethoric state. To abate
the effects of mobility we have recourse to Anti-
spasmodics whose operation I cannot attempt to
explain. . . . Many Antispasmodics occur in our
Materia Medica, but most part of them are in-
significant. The Nony and Valerian are yet used,
but the former from no analysis gives a presump-
tion of its uses. The Valerian is asserted to be
good, but I never found much effects from it ex-
cept in two or three instances, and in a hundred cases
have seen it of no effect. I have even pushed it to
very large doses, half an ounce per dose and
even then it had no effect but when it proved as
purgative.

purgative, when I was more disposed to impute its good effects to its purgative quality than to its antispasmodic effects.

The *Essum Annimule* has been much celebrated. It has the Impyreumatic Oil of Animals, rectified and rendered grateful. Though I have ~~not~~ no experience of this medicine, yet I presume from the nature of the remedy it may be of use. The greatest Physicians in Europe have testified its use.

Musk. This is one of the most powerful odorours in nature; but is generally adulterated. It should be given in considerable doses. If it was not so often adulterated I do imagine it would prove oftener successful than it does.

Opium is an antispasmodic of great efficacy, but its application here is attended with difficulty. Whenever the plethoric state is present or the disease depends on the over distension of the vessels of the Brain, and where bleeding is necessary then Opium can never be safely employed; but when the disease does not depend on a plethoric state, but proceeds from a general or particular irritation, then the Narcotic power of Opium is a principal remedy. It must always be employed at the approach of the
fit

fits, for, given in the intermediate time, its habitual use will be dangerous. — Dr Storch also does the Hyoscyamus to be useful, undoubtedly if Opium is useful, this is also, and what has been said of Opium relates to this medicine).

The other Antispasmodics have no great effects. None of the effects of Antispasmodics are permanent, and they are only useful at the approach of fits.

One method of cure of Epilepsy, which has not yet been mentioned, because I did not know to what head to refer it; but perhaps it might be referred to the head of avoiding occasional causes, is where we are undetermined as to the nature of the Epilepsy, and. Medicines have proved ineffectual, a cure has been performed by changing the climate and the manner of the patient's living. In a case then that we are uncertain about, we should use this method.

Convulsio



Convulsio.

This is distinguished from the Epilepsy by being a partial affection and a less general affection of the Brain, as I have expressed in the character. We call it Epilepsy if it is with loss of sense, tho' the convulsive motions are very limited.

It may be considered as a partial affection of the Muscular System or of the Brain. They resemble however very much. In order to distinguish the two it would lead to a question whether Excitement or Collapse denotes a more general affection of the Brain. — But neither in the present state of our Science nor in your preparation could we be sufficiently capable for these discussions.

All our researches in this subject shew Convulsions depend on the same Remote, Occasional and Predisponent causes that Epilepsy does. It depends on Collapse, and hence on remote causes inducing Collapse. The Predisponent cause is here the same, viz, a great mobility of the System. The Mobility depends on Plethora or Debility. The consideration of debility is here more curious as it depends on the condition of the part affected
more

more than of the Brain. The condition of the part may depend on the original Stamina, and is often owing to an occasional loss of tone by topical circumstances applied to the part. Thus from Hemorrhages, which have left continued Tremor upon a limb. — A fact that greatly confirms this is, that Bleeding has more effect on the adjoining part than on the whole system. An Issue long applied I have known produce a debility in the part. — The Convulsive motions are very often from want of the usual tension the part was accustomed to. Van Swieten mentions a Lady who was obliged to have perpetual leeches, or she fell into tremors, Syncope &c.

The Remedies in this disease are directed to Plethora or Debility. For the former, Evacuations; for the latter, Antispasmodics, are used.

The *Chorea Sancti Viti* is a convulsive disorder. The species that Sauvages calls the *Scelotyphe*, Linnaeus makes the *Chorea "Leteris agilitas tremula, continua, inordinata"* Vogel, "*convulsio saltatoria aut procursoria*."

The chorea is limited by being confined to a certain time of life. It occurs at the age of puberty, from

10 to 16 years old. It is from this circumstance that the peculiar nature of the disease arises. Two theories have been formed to explain this.

The 1st proceeds upon this supposition that as our system is gradually evolving by the impetus of the blood, so long as it yields to the blood, the system is not in a plethoric state, there is no tension in the system till it is fully evolved. This is at the time of Puberty, at the time the tension of the system is felt. The approach to this tension will be gradual and not exactly balanced by the other parts of the system; and there occurs a fluctuating balance, the very mobility we have spoke of. The balance of the system has hitherto been on the brain, and its tension has been greater than the other parts.

The 2^d Theory turns on what relates to the state of the genitals in both sexes.

The evolution of the genitals produces considerable changes in the whole system, even afterward, the genitals have influence as an irritation or a means of tension on the system, and while this evolution takes place the balance is fluctuating, and as the Evolution itself is unsteady it must give this effect.

effect, and a general mobility of the system. - It is my opinion both these have a share in producing this disease; both may concur, but in different circumstances in different cases.

The Cure may be of two kinds, either as it respects in view the plethoric state or the debility. This explains the two different opinions respecting the cure. - Sydenham proposes to do it by Evacuants, by Bleeding and Purgings. Sauvages says he found the Evacuations of Sydenham constantly to do harm, that his patients had symptoms of debility, and that Tonics were more effectual.

Sydenham probably might find some degree of Plethora which gave a foundation for his Evacuants. His practice however was confined to five patients, which certainly is insufficient to establish a general rule of practice. - It is only after the age of puberty that Hemorrhages are more frequent, and this might account for Sauvages's symptoms of debility. He observed that there was in his patients a great vacuity of intellect as well as of body.

The patients I have seen with this disease were slender delicate girls and boys that showed strong symptoms

symptoms of debility. I have found it occurring in chlorotic girls. I have found too the weakness both of Body and Mind, and I believe cases of Epilepsy will induce a facility of mind which goes off on the removal of the disease.

I begin the cure with Bleeding and Purgings, without very great symptoms of debility appear. Purgings, as the disease occurs frequently in the female sex, is useful to take off the tendency of costiveness. After having used these evacuations I have always employed the bark as a tonic, in very large quantities. There is probably room in these cases for Antispasmodics. Sydenham used opium, and gave an Anodyne after a purgative. I however can say nothing, from experience, of its effects. Nuxch, another antispasmodic, is recommended, but I have never employed it.

As to the other Antispasmodics, Rastor, Valerian, &c, I believe them to have no effect.

Setanus
J

Tetanus.

Under this I comprehend the Opisthotonus &c,
and the Locked Jaw.

These have been long known but inaccurately
described. I must refer you to Dr Chalmers in the
London Medical Essays for a Description of it, and
to Dr Hillary's Treatise of the Diseases of Bar-
badoes.

The Theory of it is involved in difficulty. This
is a more purely Spasmodic disease agreeable to
our former distinction; a violent contraction not
alternating with relaxation. What is strictly the
condition of Spasm as affecting a muscle we
know not, nor what sort of fixed state takes off
the mobility of the Brain.

If the action of the brain that excites mus-
cular motion may be called Excitement, we can
conclude that in Spasm there is a violent excess of
Excitement; and from this view of its being an
excess of excitement Sedatives must perform the
Cure and chiefly opium. We find a further proof
of excess of Excitement. Dr Chalmers of Carolina
sometimes gave an Ounce of Tinctura Thebaica in

24 hours, and even those doses were given without producing such a degree of collapse in the brain as was necessary. The ~~Cure~~ cure entirely depends on giving this remedy in large quantities.

Warm Bathing, as a palliative has been used; but Opium is only to be trusted to. Dr. Hillary of Barbadoes employed Musth with advantage. He suggests a piece of practice that ought to be followed; he says that a Tetanus often arises from very inconsiderable lacerations or punctures of Nerves, and the attention to this has suggested the destroying the Nerves of the part affected when it can be done. — Consult the London Medical Essays for Chalmers's Dissertation, Vol. 1. Case 1; Vol. 2. Cases 8 and 24; and Vol. 3. Cases 21, 31, and 34. —

This finishes the consideration of the Spasmi as affecting the Animal functions.

Spasmi in Functionibus Vitalibus.

Palpitatio.

We before observed the strict affinity between this affection and Syncope, for Syncope is no other than a violent palpitation, terminating in Spasm or Palsy. As this genus therefore is very much in common with Syncope, we shall find our former doctrine will be sufficiently applicable on this subject.

The Palpitation, like Syncope, may be either Idiopathic or Sympathetic. The Idiopathic may depend on causes interrupting the action of the Heart itself. of this kind are any interruptions of the Menstrual Blood, or any causes impeding the free evacuation of the heart. The heart is not only affected by causes acting directly upon it, but also by causes acting through the intervention of the Brain. These we pass over as they only afford us cases of Sympathetic Palpitation. The only exception is, when from the particular state of the heart it is liable to still greater affections, where from causes operating on the Brain convulsive motions are excited that produce a particular condition

Palpitatio

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condition on the part, such as increasing its tone and mobility. But so far as this is an object of practice it is the same exactly with the other symptom; viz. a circumstance of the mobility and tone of the part to be removed by Tonics and Antispasmodics.

11th Nov 1833

Asthma.

I have, in this part, experienced greater difficulty than in any other part of our Nosology, in finding out a proper character for Asthma, and after all I have left it imperfect. The Angustia Spirandi is the leading circumstance in this character, which is a symptom of innumerable diseases. Physicians have formed three genera of the difficultas spirandi, & only distinguished them by their different degrees. The Dyspnoea, asthma, & Orthopnoea form the divisions of Morbigenae, but there can never be admitted, as a difference in degree is hardly a foundation sufficient, for a difference of species, much less of genera. There are no limits to be set between them and asthma, as the intermediate degree is more broad and indefinite than the two extremes.

Clauvier is sensible of this, and distinguishes the difficultas spirandi as acute and chronic. The Acute he calls Orthopnoea, the Chronic Asthma & Dyspnoea. But the terms are by no means allowable. Acute is not to be mentioned at the commencement of a disease.

He calls that a Dyspnoea which is constant & uniform in

in it's state of duration; Asthma when it is sometimes moderate but suffers violent exacerbations.

He distinguishes the Asthma from the Dyspnea by it's coming in Paroxysms, and, as we have expressed it, per intervala cutiens. Systematics have by no means been accurate in their distinctions of this disease, and Linnæus and Vogel have been still more loose and indefinite than Sauvages.

Among these difficulties of breathing we must bring out a more specific & determinate disease. Sauvages has given 22 Species of Dyspnea & 26 of Orthopnea; but the greatest part of these are evidently symptomatic affections, as his Dyspnea gravidarum, which cannot form a particular species of disease. The original affection here is evidently pregnancy, the Dyspnea is only a Symptom. The Tympanica is liable to the same objection; nor do the affections of the 'Thorax' give proper species, as the Dyspnea & cordis. Pneumonica &c. I consider Tubercles occasioning a spirandi difficultas and some other affections of the Lungs themselves not as distinct species but as symptoms of other diseases.

This reason led me to reject Dyspnea & Orthopnea as Genera. The Asthma is a specific disease, which I

have endeavoured to determine, by its returning by Paroxysms per intervalla subiens, & cum angustia in pectore sensu. This always accompanies Asthma, but is not a sufficient distinction, as many Symptomatic affections are attended with a straitness in the Thorax, and even the per intervalla subiens is liable to considerable ambiguity, for in the proper Asthma the difficulty of breathing is in many cases constant, and it is never so free as in the healthy state. I mean by it that tho' the patient may have a constant disturbance of breathing, yet it is marked by more evident exacerbations.

But the chief difficulty is, that various cases of the Symptomatic Dyspnoeas are liable to Exacerbations at particular times, such as depend on affections of the abdominal viscera, and still more evidently in those that depend on affections of the Thoracic viscera which have similar exacerbations, with the Asthma. Our character therefore is defective, and we must endeavour to distinguish it by a more extensive History.

Before an Asthmatic fit comes on the person is liable to great restlessness, constant anxiety, torpor, and sense of lassitude over the whole body, and particularly about the breast. A few hours after dinner of the same day they are attacked with a considerable inflation of the

the Stomach, drowsiness, and head ach. They go to rest at the usual times and fall asleep, but between twelve at night and two o'clock in the morning they are awaked by a sense of difficulty of breathing and strictness of the Chest; with uneasiness at the bottom of the Sternum, as if something kept up the Diaphragm and prevented its descent. This obliges them to keep in an erect posture and comes out of bed. At the same time they feel as if they wanted cool air, and open the windows of their chamber.

Thus they continue for sometime. The difficulty they experience is chiefly in inspiration. Their breathing is not always frequent, sometimes slow, especially Expiration, which is attended with a wheezing and a rattling noise. The Lungs feel as if rigid & incapable of motion. They cannot speak but with difficulty, nor cough though the irritation to it is considerable. They have seldom a remission till towards morning, but for the most part it occurs in the morning or forenoon hours. In the Afternoon it occurs with the same symptoms as before.

After this they are tolerable and breathe freely for some days. But when the disease is fully formed it recurs at different periods, not however every exact. —
The

The longest period Sir John Hoyer observed was four or five days.

In many it is influenced by the variations of the moon; sometimes they have a remission of three weeks, but I have known daily periods occur for a month together, and I knew a patient in this city who had exact periodical fits at four o'clock.

These are the principal circumstances of the disease. They are not constant in every case, but where they occur they sufficiently distinguish the Asthma.

In some cases the solution of the paroxysm is followed by no expectoration, and in such persons the paroxysm very suddenly remits, in half an hour's time: most commonly, however the disease is gradual and remits slowly till towards morning when the solution is attended with cough and a little expectoration which is at first clear and gradually becomes thick & viscid and at length yellow or whitish.

This is the only distinction of the Asthma siccum & humidum, as with or without expectoration, the Asthma humidum is often improperly called Asthma, being often no other than a Dyspnoea attending Catarrhal affections, with expectoration, and in reality is nothing but a Catarrh. —

Q. R.

In some the fits are attended with no symptoms of fever, but generally there is a degree of Pyrexia, frequency of pulse, heat, and the solution attended with sweat. Hoyer esteems these as fits of fever, and considers it as an *Ephemera*, for tho' there is no great increase of heat, yet they cannot suffer the application of external heat, as it proves a considerable irritation. — These are the principal circumstances, taken from Sir John Hoyer who had the disease himself. Some I have taken from other writers, tho' from these it is difficult to collect an accurate history of the disease, as they confound the *Asthma* with the *Symptomatic* (*Dyspnoea*).

All Physicians allow the *Primaries Cause* of this disease to be a *Spasmodic Constriction* of the *Bronchiae*. If there is any difficulty in admitting this I shall mention two circumstances that confirm it. — In the *beginning* the *urine* is commonly pale & limpid, analogous to what we observe in the *Diabetes Hystrica*, but in the solution of the fit it becomes turbid & deposits a copious *Sediment*. From this it appears obvious that the *Nidus* were under a *Spasmodic Constriction* & afterwards suffer relaxation. — Another proof of *Spasm* is, that at first, there is no *spitting*, but in the solution an *Expectoration* comes on, the reason of this is that the *spitting* is stop'd till the relaxation overcomes the *Spasm* of the *Mucous Secretories*. To

To offer you a complete Theory on this subject is a task I cannot attempt. I know no disease concerning which less is to be collected from Authors. Sydenham has not so much as touched on it; nor Boerhaave, even in his *Lectures des morbis. Ventorum*. Hoffman has treated it, and is acquainted with the distinction we have established, viz. between the Asthma convulsiva and the several species of Dyspnoea; but he is by no means correct, for he often connects them together and with Orthopnea. — The Saahliaens have distinguished more accurately: They call the Symptomatic, Asthma despectivum; & the genuine, Spasmodicum. By the latter they mean our Spasmodic asthma; but from these so little efficacious practices can be collected that we are not benefited by it. — From Floyer we have the only good account of the disease, and he experienced it in its pure form. He has unfortunately blended the complaints of other people with his own, & every where interrupts us with a Theory that renders his facts confused & suspicious. His practice is extremely loose and the cases he collected from Dr Pierce at Bath are evidently Symptomatic Dyspnoea. Upon the whole his Book is in great disorder & a thorough inattention to method & arrangement prevails throughout. —

In such an imperfect state of the subject I must
 give

give you my own judgement of the practice.

Cure.

From the confusion of confounding Asthma and Dyspnea, the observations of practical writers are little to be depended on. I shall give my own opinion, and the Indications I derive from the Occasional Cause.

Nothing is more frequent than for the Asthmatic fits to be excited by Heat, as warm bathing, warm chambers &c. The heat of the season is favourable to the attack, and in the months of August & July people are more liable to them. Heat excites the rarefaction and Turgescence of the fluids and especially of the blood in the Lungs. This explains why the plethoric state is so favourable to Asthma.

The Hysteria is often changed to Asthma. Sir John Boyer mentions a case of this kind, and the proper Hysteria constantly depends on a Plethoric state. Yet only a Turgescence, but every accumulation in the lungs with increased impetus, is an exciting cause of Asthma, hence Tumours in the Abdomen will excite the disease; a full meal also will have the same effect, and the fits are worse after a full meal. Ligatures applied about the Thorax have the same effect.

Asthmatic

Asthmatics are extremely sensible to a change in the air, and a mountainous air agrees ill with Asthmatics. Bodily motion, by urging the Blood quicker through the Lungs excites Asthmatic fits; and every stimulus that increases the Impetus of the Blood will be immediately felt in the Lungs and excite Asthma.

From this it appears that the disease depends on an overdistension of the vessels of the Lungs; hence Bleeding is indicated. This is useful in all the attacks of Asthma. Bidday esteemed it a certain Remedy; but Bleeding, though it gives some relief in the fit, yet in very few cases will it entirely remove the fit; and after the disease has been some time established gives no sensible relief, on the contrary it is said to do harm.— This it may do

1st By the repetition of Bleeding favouring Pleurisy.

2^d Though Asthma is brought on and increased by the Plethoric state, yet this happens especially in the beginning of the disease, for afterwards it depends on a Morbidity, a certain disposition to Spasm, in the vessels of the Lungs.

1st Indication is, to obviate the Plethoric state

Asthma

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in the System, and particularly the turgescence of the vessels of the Lungs.

The Antiphlogistic Regimen is here necessary and likewise the use of Purgatives. In Asthma at the beginning the fits are attended with a considerable Inflation of the Stomach, and often of the whole Intestinal Canal, which infers that the Spasm extends to the Alimentary Canal and occasions a suspension of its usual motion; hence Glysters are useful.

Upon this feeling frequent purging has been found useful; they constantly abridge that stoppage in the Peristaltic motion, which gives occasion to flatulency and stony which is common to the veins of the Lungs; but a large evacuation is liable to do harm, as by suddenly relaxing the tone of the system it is liable to bring on the fit.

Blisters are found to relieve and shorten Asthmatic fits; but it is obvious under the frequent repetition of fits blisters cannot be sufficiently often administered, and hence we have recourse to the use of Issues. These give an evacuant effect abating the Plethoric state by subtracting the coagulable Lymph from the blood vessels. Sir John Hoyer however

however did not find any benefit from Issues. But he might be wrong in the part of their application, which should be behind the head. - But I explain it in another way, which is the most likely, viz, that his case was purely spasmodic, depending little on a plethoric state.

Acids, as removing the Viscosity of the Blood, may be used, as Lemons, Vinegar, and the Tartaric Acids. The Native Acids are sometimes useful, but they are very precarious. Nothing illustrates this better than the known use of Acids in Hemorrhage. The Neutras also, particularly Nitres and Sal Ammoniac, have been employed. Cold drink is constantly necessary in Asthma. Warm drink increases it, and Sir John Floyer says that merely by a large draught of cold water he has relieved the fit. The drink must never consist of fermentable liquor. Toast and water moderately acidulated is the best liquor.

Abstinence from all Animal food is necessary to Asthmatics and particularly during the fit; and, at all times, Suppers are to be avoided, but especially meat suppers. A curious case is mentioned by Sir John Floyer, that at first Suppers agreed well with a patient but afterwards did not. - The

The Asthma is frequently joined with the Dyspepsia. ~~with~~ The former is frequently accompanied with Indigestion and loss of tone in the Stomach. Both the diseases are founded on the same Story, which can be transferred from one Disease to another. Fermented liquors in this case, and even the Vegetables in the Farinacea cannot be administered, and whether the Dyspepsia seems to be considerable some Animal food may be ventured on. I have found in all young, and sometimes in old people, that a spare diet was best, and a Vegetable the most agreeable. Sir John Hoyer, in one part of his book, says "the best Asthmatics are nourished, the longer are the intervals of the fit." But afterwards he says "Asthmatics may eat Beef, Lamb, Mutton." This is a *conco ad populum*, and certainly not Animal food.

All meats of slow solution, all fat meats, gelatinous or viscid, as the young meats, are pernicious. Sir John Hoyer says "all young meats and those abounding with Mucus, as Fish, Eggs, &c. are bad."

All Vegetables of slow solution, Cucumbers, Cabbage, give flatulency, and upon this account Milk is an ambiguous diet in Asthma. — Milk is always more or less crudified, and hence admits of slower solution.

solution. To those however to whom milk happens to be of easy solution it is proper. Some people of strong stomach cannot digest milk. These are the principal Rules to answer the first Indication; but from the same Occasional causes a different issue arises.

In some Asthmas there is no suspicion of a Plethoric state arising, but purely Spasm, brought on by causes operating not on the blood but on the Nervous System, as the passions of the mind and any thing that gives considerable Emotion either of good or bad news. It is common with all those we call Nervous but more especially with those affected with spasmodic diseases, such as Epilepsy, Dyspepsia, Hysteria.

Van Helmont has many facts to our purpose. He says "quicquid sanat Epilepticum sanat Asthma: aciem." Asthma is brought on by violent odours. It is brought on by any irritation of the Lungs, as smoke, dust, &c; and even vicissitudes to which the Lungs are exposed are productive of the same effect, as much speaking and change of Air.

Many Asthmas are much better in Cities than in the Country. This can only be from their experiencing greater vicissitudes in the Air in the Country than in the Town. These Asthmatics too are attended with

+ Dyspnoea & Asthma. I have mentioned the
distinction of—

that state of Spasm the effect of Limpid Urine, & are cured by Tonics and Antispasmodics. —

Hence then there are two species of Asthma and two Indications arising.

1. To obviate Plethora.

2. To obviate Spasm.

The distinction however of these cases is difficult for I find every cause of Turgescence to be most effectual in bringing on a fit, but even the plethoric cases are dependant on the spasmodic state. — This has given difficulty in practice, and particularly respecting the use of Bleeding, for in the spasmodic state Bleeding can never be very effectual and can only be repeated in the plethoric. The propriety of Antispasmodics upon this account has been disputed. — In the purely Nervous Asthma any degree of Turgescence, increased heat &c. will excite it, & hence the cooling regimen is here requisite.

I now proceed to mention the Medicines proper for the cure of Asthma when it is purely Spasmodic!

Vomiting. This is founded on the connection of the Asthma siccum and limbidum. These may be changed into one another. If any previous cause of Catarrh has come on the vomiting may be useful.

as an Expectorant, and vomiting may often prevent or alleviate the fit. But when the fit is advanced vomiting cannot be ventured on as it increases the determination to the Lungs. It has excited fits, and has even produced suffocation.

Purgatives, in the Spasmodic Asthma, when combined with Dyspnoea, are necessary; but in the pure Spasmodic state great evacuations this way is pernicious. —

Exercise, which in all cases is suited to preserve the proper condition of the system, is of use. The prime Affection is the suppression of the perspiration. When I said heat was liable to excite the fit, yet cold as suppressing the perspiration is extremely pernicious, and any thing promoting this is useful; but the Exercise must be very moderate, and gelation alone is proper.

These Remedies can only abate but not cure. In the View of a Spasmodic Asthma the cure must be performed by Emics and Antispasmodics, and particularly by the various Solids, Volatile Alkali &c. but the relief from these has but is only temporary and they are hurtful in being stimulant and disagreeable. Hoyer gives an instance where ʒss of

Heartshorn has increased an Asthmatic's fit to the hazard of suffocation, and I have known one instance of this. Linctus Aqua saluta Sulphur &c. are pernicious. What luck might do I am uncertain.

As it is a spasmodic affection we have recourse to Opium. Smeaton, Riverius &c. give Opium and strongly recommend it. But in all Plethoric cases, Opium may be hurtful as it constantly narrows the Blood and occasions a Stagnation of the whole System, and even in more purely Spasmodic cases the frequent repetition of them increases the irritation of the System and weakens the force, and hence it tends to harm, but from a general view of this disease, and from the experience of Physicians we may conclude that in a proper application it is useful. In fact, the great enemy of Opium, condemns it in Asthma, but he mistakes the Hydrops Pectoris for Asthma.

Spasm depends upon Mobility and Relaxation, and hence Tonics may be useful. Sir John Storer mentions a Lady only relieved by the Bark. I have experienced the same good effects, particularly when the disease is periodical. (More)

There is a difficulty in applying the Bark when a state of Plethora and Turgescence occur, and it is to be remembered that though it is a powerful remedy, yet its effects are by no means permanent. It lasts for a few hours only as is obvious in the case of Intermittents. You may often see the Bark applied without success because it is improperly applied. There is something obstinate in habitual diseases, and four cases of Asthma are cured by the Bark. Sir John Poyet mentions Bitters; but these are less powerful than the Bark.

Besides these a principal Tonic are the Myrsinics. These have been employed but have not been found of service, rather have done harm. What this is owing to I am uncertain. It is curious that Asthmatics must both drink and eat little in the forenoon. Sir John Poyet could not bear more than a small quantity of drink. Perhaps the Phlogistics have been given in the form of water, and hence merely by the quantity of water may they increase the difficulty of breathing and turgescence of the Lungs.

Supplies

Pertussis.

This is the Chin-cough or Whooping cough. It has been frequently mentioned, but no tolerable history has been given of it. I shall attempt to supply this defect.

History.

The disease commonly appears as a common catarrh, and nothing at first will distinguish it but its being Epidemic. In some it never puts on its proper form, and is only known by the disease being in the family.

It consists in an Involuntary cough. In common Cough there is a strong propensity from irritation; but here the repetitions are so quick as not to be perceptible, hence the repetitions are so quick as not to be perceptible, and it is also distinguished by the stopping of the Cough to give way to a considerable Inspiration that always makes some noise. It is from this noise that the term Whooping is taken. I have endeavoured to express this in the character of my Synopsis by saying "cum inspiratione sonora." For the most part the disease is confined to these two fits, but sometimes with the Whooping repeated often.

At its first appearance there is no Expectoration, but by degrees a quantity of Mucus is secreted and thrown up. This Mucus thrown up is at first small in quantity, but increases to a considerable degree. — It also changes in its appearance; at first it is only transparent, but thickens by degrees becoming opaque, and often approaches to a purulent appearance. It is commonly in proportion to the Expectoration that the continuance and violence of the Cough remain; when the expectoration is considerable it is finished at the second Coughing generally. The violence of the Cough often excites a vomiting, which, when it occurs, puts an end to the present fit. This is the ordinary form of this disease.

In Infants under two years old it does not appear so distinctly. The disease occurs more or less frequently in the course of the day. It generally continues from between three weeks to three months. I have known an instance where it continued two years.

In children past seven years old it is seldom attended with other remarkable Symptoms than the above, and is a perfectly safe disease; but in younger children it is otherwise, for in these very frequently blood is thrown

up during the cough. This is not a very frequent appearance; but I have often known it produce eruptions of blood from the nose, and even eyes and ears. These last however are seldom of bad consequence, and that from the nose is generally with good effect.

The other Symptoms are 1st a Fever. The disease sometimes attacks with a fever, but generally the fever supervenes.

Dr Sydenham tells us there is no fever attendant on the Whooping; this shows us on what an uncertain footing the facts of Physics are. Dr Sydenham I, on the contrary, never saw it Epidemic without as many being attacked with fever as not. The former is generally remittent. At noon more or less of fever comes on and continues through the evening. In many instances it at length puts on the form of a Pile, often with considerable delirium during night, copious sweats chiefly about the head and neck, but seldom extending to the lower extremities.

The Dyspnoea attending it is sometimes constant and considerable; and the fever and Dyspnoea generally form the most dangerous Whooping. The state of the Mucus with these Symptoms appears unusually thickened

thickened; it is unfortunate we have no dissections of patients; probably there are Tubercles suppurated, for the disease at the end often puts on the form of a Phthisis.

The disease depends on a contagious matter introduced. Most of the cases I have seen happen when the Measles have been previously epidemic. — As the Measles attack the Bronchial Glands, and ~~are~~ ^{are} ~~propagated~~ ^{propagated} they have something in common to each other; but they are certainly distinct contagions as we have had many instances this season of children having the Chin cough who have previously had the Measles.

Cure.

The Cure is extremely difficult. I must refer you to Dr Sydenham, in his 312 Page. He candidly says the remedies are all inefficacious. He allows the method to be pursued is by Bleeding and Purgina; he says it is "*perniciiosissimum & fere insanabile malum*." — Bleeding in vigorous children is of service; but when the fever does not appear at the beginning but supervenes upon the disease, it is generally with Symptoms of debility, and Bleeding cannot be admitted without aggravating the Symptoms; sometimes purging spontaneously supervenes, but this is not

not critical. Costiveness is however to be obviated.

Blisters are of service. A perpetual blister in a patient of mine moderated the symptoms ~~exceed~~ ingly as I found their violence returned on removing the blister.

Issues are likewise very useful.

Vomiting is still a more effectual remedy. I mentioned this before as a crisis of the disease, I have found that by exciting it artificially it becomes habitual and renders the fits more safe. Vomiting is a means of emulging the Mucous glands of the Bronchia, and promotes the expectoration in this cough. Vomiting too may be useful in taking off the determination to the Lungs, and therefore of service in this disease.

Physicians have imagined Emetics were useful given in doses not sufficient to produce Vomiting, The Sulphur. Muratum Antimonii is recommended by a late Author given in such doses as have no sensible effect. Whether it is so I know not, but I know the other Antimonialks are of no service unless given to a sufficient dose.

Dr. Fothergill has used the Tartar Emetic with success. vide his paper in the London Medical Essays; but

but his method of exhibiting the Tartar with the Testacea is improper as the Absorbents decompose the Tartar.

Wherever the Fever is constant, or particularly if it is periodical, we may use the Bark. Some years ago Dr. Burton of York recommended Cantharides, ~~and~~ Bark & Camphor, combined together, which I found some success from, but from the inconvenience of the Cantharides was induced to apply the Bark alone, which I did with still greater success.

The muscus Oxycidalis is only an Astringent, which Dr. Mead successfully practiced. He endeavored to cure it by exciting the passion of Fear by putting the child near a fire.

It is probable the disease may be relieved by Antispasmodics, as it is evidently a convulsive disorder. Dr. Morris found great relief from the use of Castor. I have not yet however found any advantages from it. If I was to employ any Antispasmodic it would be Marsh.

As the Pertussis is a Catarrhal disease ~~we~~ we are led to employ Pectorals; but these are of no service. Squills I have tried but without success unless given to a dose sufficient to have the effect of

of an Emetic.

All the Sweet and Mucilaginous Pectorals are of no service, but rather hurt by loading the Stomach. - A change of Air is extremely beneficial, I have known several patients cured by it. A change of our habit is of service in all Spasmodic diseases. This is well known in Epilepsy, and I have observed it in all Spasmodic diseases, and therefore it may be practiced in this disease.

We proceed now to Spasmi in Functionibus Naturalibus.

Most of these occur in the Alimentary Canal, and none in the Secretories, except in the case of Diabetes.

I have not made Vomitus a genus, because in 99 cases out of 100 it is Symptomatic. The few cases of Idiopathic Vomitus proceed from Anger immediate-ly taken into the Stomach.

Spirae,

Pyrosis.

This is not distinctly marked by Systematics, tho' it has always been observed in all countries. It has been confounded with *Acid* and *Cardialgia*.

Sauvages uses *Pyrosis* for *Cardialgia*, or Heart burn. Tho' *Pyrosis* is not, like *Cardialgia*, a symptom of *Dyspepsia*. If I was to admit heartburn as a disease, I should certainly employ the term *Cardialgia*. It is indeed often attended with *Cardialgia*, but it is as often without it. It is a disease, well known, in this country by the name of *Waterbrash*.

The symptoms of it are a pain felt in the region of the stomach, not precisely determined *Rostrum*, but sometimes extending downwards to the Navel, and is often felt in the *Scrobiculum Cordis* spreading upwards from thence to the *Esophagus*.

This pain of the stomach is not a sense of distension, but rather a sense as if the stomach was drawn inwards, expressed by the patient as of a sense of gnawing, and appears to be the same as occurs in the *Morus Ventricle*, only more violent.

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+ - 6 (cardinalis) ...
here some exceptions that this fluid ...
initially assigned & this is to be explained from the
planation of the ...

violent. The pain as it is extending to the Oesophagus is attended with some Heat and Nervinony. This pain brings a considerable quantity of a fluid into the mouth, which producing an Eructation is spetuh. This fluid is without colour; often it is without taste but sometimes is of an Acid taste. It affects all different ages from a little before the age of puberty and continues through life. It attacks both sexes but much more frequently females. It especially attacks barren women and those affected with Hæmorrhoids. It seems often to be excited by acerbent and acid food and often by rancid & Impeyreumatic food, as by rancid pork &c; but often it is from no evident cause, from no evident indigestion, and is particularly liable to attack people when their Stomach is empty. This is the History of this disease.

The Theory of this disease as to what relates to the Eructation and that arising from Acids I have formerly explained when treating of the Auctus⁺ Morbus Ventriculi &c. There appears a moderate convulsive motion of the Stomach, which, how it is communicated to the several ducts of the Stomach, we can readily understand. The Eructation therefore in general gives no difficulty, but the peculiarity

of the fluid does.

This may be thus explained. There are contractions of secretory ducts that straighten their passages but do not entirely stop them up; and there may be an increased secretion made notwithstanding the constriction of the part; in which case only the thinner parts will pass off while the thicker parts remain behind.

Every body knows that in Diabetes Mellitus there is a copious flow of Urine, often without taste and smell, and there is in that disease no doubt of a Spasmodic affection; and while this can increase the secretion there must be some separation, which we impute to the constriction that retains the thicker parts, but pours out the thinnest.

Likewise in the Scurvy there is a Suppression of the Perspiration. From these Observations then it is evident that our theory of the fluid in Pyrosis is true. —

I have no difficulty of applying this to the Stomach, that under the degree of convulsive action which occurs in the Stomach it is communicated to vessels of the Gastric fluid, and that only the incisive liquors that are mentioned is here poured out, not

the greater parts. This is enough with regard to the Pathology of this disease.

Cure.

This is difficult, and the disease is very liable to recur.

1. I hinted above that it seems often Sympathetic, and particularly, that it is often connected with Pleor albus. When therefore the primary disease can be observed the Cure must be directed to these primary diseases.

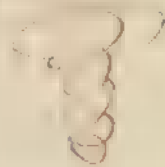
2. Where this disease depends on evident causes, as particular food &c, or from causes producing a Spasmodic affection of the Stomach, the cure is by avoiding these Occasional causes or by correcting their effects; and if it is joined with Acidity then Alkaline Medicines are of use; but when we cannot attribute it to these then we have found only Opium to be of use. But there is a nicety in its exhibition, for if you give it in a liquid form it will be returned by a Stool before it has had any effect, and therefore we must give it in a solid form, and in the smallest bulk possible. This I say is the only effectual Medicine. - Where the disease is joined with other circumstances of Dyspepsia it is recommended

Pyrosis

194.

recommended to try medicines for Dyspepsia, as
Aromatics. Bitters, Tonics &c; but I have found these
to be of little service.

Cholica.



Cholica.

This is a subject that has been variously perplexed and embarrassed. I shall endeavour to clear up the subject. I shall avoid noticing the subjects that have embarrassed this disease; and shall therefore deliver my own doctrine.

1.st Almost every pain of the lower belly has been called Cholica; but we limit it to those pains that are affections of the Intestines; but, to be certain of pains being seated in the Intestines, exclusive of the other viscera, is difficult; but we can often ascertain it by observing the following rules;

First. By the part the pain occupies, as being not in the region the other viscera occupy, as when it is not in the region of the Liver &c. When it is in the region of the Navel we judge it Cholica; but from this the affections of the Pancreas can sometimes be separated. In all cases we judge from the seat and number of the pains, and therefore say in my character "Dolor abdominis, præcipue circa umbilicum torquens?"

I think it very proper to consider the Theory of this disease

disease, and therefore I say,

1. That every propensity to remain obstructed of the Intestines excites the action of the Abdominal Muscles. We may therefore perceive why every uneasiness in the Intestines should be combined with uneasiness in the Muscles. — Every sort of violent motion exciting the Abdominal Muscles will be felt in their tendinous extremities and more especially where all these concur, that is, about the Navel.

The Navel is drawn inwards, and the various spasmodic Constrictions of the Intestines in various parts can be perceived, so that it is common to compare them to a bag of Apples. But the Abdominal Muscles can only combine distinctly about the Navel; it is sometimes like a belt constricting the belly, and in various other shapes is Cholica to be distinguished.

The other viscera of the Abdomen may have various pains so as to be difficultly distinguished from Cholica; but I think they seldom have constriction of the Abdominal Muscles. —

The Virus Astricta is ambiguous and does arise sometimes from affections of the Kidneys, but from this

this I think cholica may be distinguished, as the
 alvus obstricta is not so obstinate therein as in
 Cholica.

Stones in the Biliary Ducts too sometimes is
 taken for Cholica; but it is seldom attended with
 pain of the bowels; but here we are not long kept
 in doubt as this last soon produces Jaundice.
 Sometimes too Nephritic pains may be mistaken
 for Colica, but generally here some symptoms
 appear in the excretion of Urine, for the pain in
 Nephritic cases generally extends to the Testicles,
 I have indeed known Urine suppressed in Cholica;
 but it is rarely so; therefore by these means Colica
 can generally be distinguished from the other
 affections of the lower belly, and hence I think
 the character we have given it will sufficiently
 distinguish it.

Perhaps you will think me wrong in not
 mentioning in our character that Inflammation
 is absent in this disease, the reason of which is
 because in every genus the character of the last
 is always to be included, and this is "involuntaria."

Perhaps, tho' you will be surprised I have here
 included the Hæm and Passio Nera. (He)

The Case of Meus is a rare occurrence, I have only seen two cases of it; one where Mercuroseous matter was thrown out by vomit, and where the disease was attended at the end with Inflammation and was fatal, but this was not attended with Inflammation in the beginning. The other case was attended with the return of the Glysters which were injected up the Anus, by the Mouth, but this was attended with no Inflammation. Sir John Pringle however says that Meus is always attended with Inflammation and that the Intestines may be inflamed and have been found so upon Dissection when no evident marks appear to make one believe it. But I say that when the disease subsists long in the ordinary form of Cholica and has often admitted of Cure, and is afterwards attended with Inflammation, that this is only a Sympathetic Inflammation not Idiopathic. In this way I form a genus of Colica.

The Proximate Cause of Cholica is an ultimate Spasmodic Constriction of some portion of the Intestines. As then we treat this generally, it is not necessary to mark the different Species; for different species are only different by the difference

ferences of the Remote Causes, all of which unite in making it a Spasm which is to be cured by the same Medicines.

Perhaps you may, however, think we should distinguish the Species of Colica as differing in degree, and those that are attended with peculiar effects, as Colica Pictorum; but I say this last mentioned disease is only different ^{in degree} and does not require different Medicines, only different in power. —

Cure.

This is by removing the Spasm of the Intestines, which is the fundamental circumstance of the disease. This is to be done

1. By such Medicines as relax the Spasm.

2. By exciting the action of the Intestines, as we explained in Dysentery, viz, that by exciting the action of the upper part of the Intestines the Spasm in the lower part may be overcome.

3. By Mechanical dilatation.

1. By such Medicines as relax the Spasm. —
These remedies are —

a. Bleeding.

b. Blisters.

c. Antispasmodics.

C. Antispasmodics.

d. Emollient Applications.

Bleeding. This we might consider, a priori, as ineffectual; but again on reflecting on the ready communication of Spasm to the Anterior System we shall see how Bleeding by relaxing this System may produce relaxation in the whole system, and by this we explain the efficacy of Bleeding in resolving Spasm in all Spasmodic diseases:— but Bleeding is of use for another purpose, for the Spasm taking place in the Intestines, by straitening their capacities & interrupting the passage of the Blood, is liable to promote the Inflammatory state, and it is frequently experienced that such Spasms are liable to a supervening Inflammation: these constantly in all vigorous systems are to be obviated by Bleeding. The Aneur has been considered as purely Inflammatory; but this is dubious. I think then the first part of the cure of this disease consists in Bleeding.

Another remedy to remove Spasm is **Blistering.** This is useful we know in all Spasms, and useful in Dysentery: I have seen it useful in the Cholera where there could be no suspicion

suspicion of Inflammation. Their effect I explain from the relaxation they produce being communicated over the whole surface, but particularly to the subjacent parts. — Sir John Pringle however suggests a difficulty in their use because they are liable to interrupt the use of Warm Bathing; but I never apply the former till the latter has been tried. But at any rate I think there would be no hazard in ^{Bathing after} blistering if the Blister has only been applied 24 hours before the use of the Warm Bath.

The Spasm may be taken off by Antispasmodics. Opium, of these, is the sole & chief; and is useful upon several accounts.

1. It is here, as an Anodyne, useful in alluvia: being the most excruciating pain the Body is subject to; hence called the Miserere.

2. Vomiting is liable to occur in this state, which it is requisite to quiet before we can use other Medicines, and Opium is the only efficacious medicine for this purpose; and the Spasm in many cases is so considerable, that, exciting the action of the Intestines would be needless if the Spasm was not previously relaxed by Opium. The

The Vomiting frequently frustrates the use of Opium. We have endeavoured to obviate this by giving it in a solid form; and, when this also is rejected by Vomiting, we succeed in the external Applications of it, by Plasters, which often quiet the Vomiting.

There is a case of Vomiting that attends some Diarrhoeas, and here Vomiting prevents the use of Opium; and here Opium is to be used, which is equally effectual. In the Colic however this is not admissible as it leaves a considerable torpor on the parts affected of the Intestines.

Opium is more effectual than Bleeding & Bleistering, where it can be given in sufficient quantity; it does not however cure, but is only palliative; for, while it relaxes the Spasm, it produces a torpor in the whole of the Intestinal Canal; and therefore, unless we can join purgatives, the considerable use of Opium retards on the one hand, as much as it favours on the other hand, the cure of this disease.

Emollient Applications. — This is by external

external fomentations applied to the lower belly; but this is less perfect than the entire immersion. We know the connection of the feet and legs with the belly, and hence the warm bath is preferable to fomentations. This while it relaxes the parts spasmodically affected, has not the effect of Opium in inducing Torpidity; but, on the contrary, the heat rather excites the Intestines, and I have found a stool excited in the time of the Bath.

None however of all these means of inducing relaxation are sufficient. We must have recourse to our second Indication, viz, to sollicit or excite the action of the Intestines to overcome the constriction, and to propel their contents that are the cause of this constriction.

Purgatives are employed by the anus or the mouth. This of advantage to sollicit the action of the great guts by Glysters. The disease may be owing to a constriction of the colon from the feces acquiring too great bulk or hardness, and Glysters may be excellent in exciting their action in this case.

As we have suspicion of an Inflammatory affection

+ A better practice is the use of Antimonial Purgative Pills,
Of the Vin. Antimon. the quantity is from ℥iv to
℥viii, of the Symp. from ℥i to ℥ii -

affection, Saline Glysters ought first to be given, (Pneumata cum Sal: com:) as common Salt is the most powerful Stimulus to the animal fibre.

Tho' other saline matters are sometimes useful, but are liable to fail from their being too weak, and they give too prompt and sudden a Stimulus, not sufficiently permanent.

Serpentine is still more permanent, either in the form of Glysters or by the mouth. They are liable however to inconvenience, the preparation requires care and the exhibition a dextro. If an ounce is properly prepared it will seldom fail. If, however, it should fail, Practitioners have had recourse to more Acid purgatives such as Colocynth, which is an irritating Inflammatory purgative. ⁺ Tartar Emetic has also been

given in Glysters, but in all these sort of Glysters, if the obstruction is far down in the great Intestines they are ineffectual, as they never prevent their entering sufficiently far up. It may be owing to hard faeces in the lower coils of the Colon, and hence they may be out of the reach of the Glysters. The further Glysters reach they are the more certain of success; but often the

prevent this. —

A very powerful application is the Tobacco fumed Glyster. This is extremely powerful and which we conceive will reach a great way into the Intestines; we know it is the most effectual means of reducing an incarcerated Hernia. Mr Schaffer of Philadelphia has lately offered a new machine for the exhibition of this species of Glysters. I myself have contrived a machine for this purpose which is simple and very effectual.

When the disease however is without the reach of Glysters, and only in the small Intestines, we must use Purgatives by the mouth; for not only the danger of a supervening Inflammation which might be increased by an Acid purgative renders such improper, but also the gentle purgatives are preferable as giving a gradual and gentle stimulus through the whole tract of the Intestines.

In the present case then the Spasm is better relieved by the gentle Cathartica, e. g. Glauber's Salt, and if the Stomach will retain it it may be extended over a considerable part of the Intestines at once, but it is liable to irritate the Stomach, and ready to be thrown out by vomiting, which, as the

is already irritated, makes it the more liable to that. An addition of the Marine Salt, from $\frac{1}{12}$ to $\frac{1}{9}$, is still in some measures prevent this, and this is the reason of Dr Heberden's preference of the *Sal catharticum Amarum* to Glauber's Salt, because the marine Salt alone constitutes the difference between them. The Neutrals I render more pleasant by dissolving them either with Tamarinds or Sirup, &c. Linna or Sugar.

Practitioners have proposed a variety of remedies, the Gum Guaiacum has been much admired, and formerly it was a favourite remedy in the West Indies for their dry belly ach. The best form of it is with Mucilage, or the Pilulem Frii, and thus diffused in Mucilage it may be safely given, in quantity to two Drums, with success in quantity often grains for a dose. I have found it's good effects, but I think it superseded by the Mucos Ricini—the Castor Oil.

I cannot readily explain why it should be so powerful (as a laxative), yet it is so evidently even in obstinate Spasms. I know Pills are of the slowest mixture in our stomach: but most certainly longer in our stomach than tea, and with many people this

Oils do not digest; hence it may pass and go on to the Intestines in its oily form, and we often see it in its pure state voided by Stool.

Many use small doses of Calomel. Ten grains of it have been found the most certain remedy for obviating Spasm; but I suspect, where there is an Inflammatory state, if it does not overcome the Spasm it may do harm. The other Acid purgatives are attended with the same bad consequences.

My caution has prevented me from the use of Acid purgatives: These however have been used much by Physicians. I have frequently joined Senna with Salts, but I find it very liable to irritate the Stomach.

Tartar Emetic is a purgative only lately used. The French Physicians have told us Vomiting is a successful practice in the Colica Pictonum; but I cannot well conceive how Vomiting, as increasing the Peristaltic motion & increasing this symptom already in excess, could be useful. I imagine the effect must have proceeded from a part of the Tartar Emetic being washed over the Pylorus and operating as a purgative. I must confess I should only employ it as a purgative, and in this view it is very successful.

Shewen

Showering Cold Water on the lower extremities has been found useful. Dr. Stenerson first gave rise to this Practice, and in several cases it has been useful.

One other means of Removing Spasms is
 3. By **mechanical Dilatation**, either by the mouth or by the Anus. For the former Quicksilver has been used. I have seen it used three times without effect, and I conceive it is not likely to be useful. We know any viscid matter will divide the mercury into small particles, and before it can arrive at the part of the Intestines affected ^{with pain} it will be so divided that it can have little effect. From Dissections I have seen it so divided & diffused over the whole mass. If it had all run together it might have effect, but in its divided state it is useless.

The other means of Mechanical Dilatation is by throwing in a quantity of warm water, by the Anus, which in Dogs has been found to run out again at the mouth. I refer you to Do. Baen for a further account of this. I know nothing of it myself. — This finishes the Cholera and its several Species, which we have comprised under one Genus, viz, Colica. Cholera.

Cholera.

This is a disease formed by vomiting and purging concurring at the same time. It is an instance of a conclusive affection that shows the mobility of the Alimentary canal and how variously moveable it is. The first observation that I make is that it is often only a Diarrhoea from violent causes attended with vomiting, and it is to be explained in the same manner, so that I hardly thought it necessary to separate it from that genus; nor should I have separated it but it is necessary in our Nomenclature to break the Genus of Diarrhoea as much as possible.

I am the more inclined to this as I would only treat of one species, the Cholera Spontanea of Sauvages. But the character I have given is not so well adapted: I added the "*humoris biliosi*" but, as I consider only the Spontanea, the term "*plenumque*" should have been omitted, and we may say the disease consists solely in an immoderate excretion of Bile.

When I say it arises without any evident cause it is in opposition to an Acid matter thrown into the

the Intestines. There may indeed be exciting causes, but when it arises spontaneously it is distinguished by its occurring at one particular season only. Sydenham is aware of this difficulty; he confines all the species as admitting all of the same method of cure; but limits this as a distinct species.

This most commonly in England occurs in July, but in the Southern climates it continues much longer. When upon the subject of Fever I alluded from Leghorn that it occurs in the warmest months, but is varied as the warmth sets in sooner or later. This was his observation respecting Malaria. It is then manifestly the effect of a warm season, for its duration is much longer in Southern than in Northern climates.

The disease then evidently arises from an acrid matter thrown into the Intestines. Does this Acrimony arises is difficult to explain; whether at this season the Bile is endued with a peculiar acrimony or requires it in consequence of an increased secretion may be curious to enquire. — Both these circumstances have a share in the disease? The Bile at these seasons is constantly passing into the Intestines, but is not attended with these effects; it

it arises from suppressed perspiration. — During warm seasons if rain falls and men are exposed to this, they are liable to the disease; also from cold water taken into the stomach checking the perspiration, so that it appears to produce an increased determination to the liver and thus affects the Bile.

I state these questions which might bear a larger discussion, but as they relate more to Bilious diseases in general than to this in particular I omit them. — It is enough for us that a quantity of Acid bile, however produced, is determined to the Intestines, and on this the Cure turns.

Cure.

The first step is to favour the Evacuation of the Acid matter by a large & plentiful dilution of mild and bland fluids, such as do not enter into the mixture or are apt to ferment in the stomach. A quantity of light broth is fitted especially for this purpose: Sydenham also advises this, but the ancients employed cold water for the disease; but how far this is proper is uncertain.

The Evacuation here taking place is carried on with violent convulsive motions in the Alimentary

mentary canal, which are liable to be communicated to the rest of the system and occasions cramps and convulsions, sometimes syncope; & they are liable to continue from a state of Irritability once produced in the Intestines.

If these convulsions and Spasm appear with violence and are communicated to other parts we must have recourse to Opium; and this is the whole of our management of this disease.

S. J. Marsh,

* Ed. the former Doctrine on this subject of the
communication & determination of nations.

Diarrhoea.

This I repent having inserted as a Genus, as it has no better title than Dyspnœa, Vomiting &c. Diarrhoea is universally a symptomatic affection except in cases of Ingesta taken in which are not objects of our practice.

There is no use for any but natural Genera, i.e. Genera which comprehend many Species that may be treated in a view to the doctrine of the Genus, i.e. that admits of a Generic treatment. I inserted it however with a view to oppose it to Dysentery, and for this purpose is the character "non contagiosa or sine pyrexia" formed, otherwise it is too simple of itself to form a natural Genus.

We must begin with saying when it is an affection of the Alimentary Canal.

We must say in what cases affections of other parts operate, and determine matters of various kinds to the Intestines. You conceive the determination of motions, * such as the passions of Fear, producing Diarrhoea. We know that various matters generated in different parts of the System may be absorbed

absorbed, translated, and determined to the Intestines. The Urine &c may be here also determined. If we consider the Diarrhea as depending on affections of the Alimentary Canal we must consider when the disease arises from increased Irritability or the power of irritating substances applied. In the latter the principal morbid symptom is the quick passage of the ingesta unattended. — Here if we were to investigate the causes they would be ^{found} very obscure. Were we to consider all the irritating substances thrown into the Stomach, or to consider the Alimentary matters it would lead us to the consideration of the changes, states, and conditions these are liable to; and the different states of the pancreatic liquors, the bile, saliva &c, must be considered. We know all these are liable to great varieties. Thicks we know poured into the intestines, as blood, pus &c, produce various effects.

I have here given a set of causes producing Diarrhea. This subject belongs to the Pathology or to the Symptomatology, but the discussions would be infinite and must necessarily comprehend most of the diseases of the human body.

(Lure)

Cure.

As to the Cure I am to invert my usual order to inform you not what you ought, but on the contrary what you ought not, to do.

So far as I am acquainted with practical writers they have been very loose on this subject. They have proceeded on two principles,

1. On an Acrimony affecting the Intestines.
- Or, 2. On a peculiar Laxity affecting the Intestines.

For the first they used Correctors of the Acrimony, Demulcents, Opacates to palliate, and Astringents for the Laxity.

On these Medicines commonly employed I am to make a few remarks.

Of the Correctors of Acrimony the Absorbents are universally prescribed, as Burnt Hartshorn and Chalk. Where the Acrimony is evident absorbents may be proper; but a promiscuous use of these must be improper. In the case of Ferrous putrescences may be suspected as the cause of Dysentery, and here Absorbents are improper as they remove the Acid that is the only resistance to the Soluble tendency.

2. There is a putrescent tendency in the

Stomach and Intestines in Fever, which is the foundation of the Diarrhoea that occurs there, & therefore the Acids should be employed.

Boerhaave would persuade us to a singular medicine, a particular Bole, In his 80th Aphorism. Number 5th, in treating of the various Acrimony, where he recommends the farinacea & demulcents.

— Whoever knows any thing of natural history or Chemistry will find what the ancient Bole was, & that his recommendations are not well founded. There is an Acid in Bole combined with corroded Iron, but it is not to be evolved by any power but a strong Acid. Van Swieten too, his commentator, says it will not answer unless used in considerable quantity.

The mucilaginous & oily remedies are not much to be depended upon; I have little faith with Degner's Mucilage or Sir John Pringle's Mucilage of Trochets. The Emetics are particularly useful. When the Acrimony arises in the Stomach, or where the afflux to the Intestines arises from a constriction of the surface Emetics are a powerful remedy; and, as these often answer the Intention of Purgatives, they may answer the effect

effect. Practitioners however rely most upon Purgatives, and constantly prescribe Rhubarb, which in many cases is improper. It is the promiscuous use of Purgatives that I especially complain of. In Cholera the Acrimony is sufficient to evacuate itself and exhaust its source. This will apply in other cases, dilute but strongly, and the matter will evacuate itself, except it is of the nature of a ferment and then it will adhere.

This practice seems to have arisen from the observation of Dysentery cases, but I altergo in Dysentery that it is not the evacuation of Acrimony but the overcoming the Constriction that is our principal object. If there is an increased irritability of the Intestines Purgatives must be improper.

3. If the increased afflux is from an erroneous determination of the system, from suppressed excretions of Urine &c, Purgatives are also improper.

4. Where the Diarrhea arises from too great fluidity, or what is called a Colliquation of the blood, and from a laxity of the Intestines which is the case of Colliquative Diarrhea, Purgatives can be of no service.

5. When the determination to the Intestines is

the Inflammatory kind, as in Measles, Sydenham says Bleeding is necessary, and therefore we say Purgatives are hurtful. Nothing therefore is more absurd than the promiscuous use of Purgatives in Diarrhoea. It is only in cases like Dysentery, where considerable Tormenta occur, that they are proper.

Opiales. However difficult it may be to explain the causes of increased Irritability, yet the effects of Opium here confirm the fact of Irritability actually taking place; so that whatever causes prevail Irritation to a certain degree certainly does. Where the evacuation is in considerable quantity Opiales are certainly necessary.

Two cases are to be remarked where Opium is hurtful.

1. Where the Diarrhoea can be suspected to be of the critical kind, as in many cases of Fever.

2. Where it depends on an Irritation which is necessary to be evacuated.

In the first case we do harm in inhibiting it, by stopping a salutary evacuation. — In the last place we do harm by preventing a removal of the cause of the Disease. — If from a surfeit a Diarrhoea arises we should favour the Evacuation & dilute & tranquilise. But

But if, as in Cholera, the convulsions are violent, then, without regard to the retention of morbid matter, the disease is to be cured by Opium. Hence Opium is necessary even in some cases where they seem to be improper. — The relaxation of the action of the vessels brought on by Opium is not permanent.

Astringents. In how many cases of Diarrhœa these may be improper will be obvious. Astringents are only applicable in cases of loss of tone in the intestines. — In some this loss of tone arises from the Colliquative Diarrhœa, in others from long continuance of Spasm — the Cholera is an instance of the first kind, the Cholera of the latter which leaves a Diarrhœa merely in consequence of the loss of tone.

These two causes conjoined, viz, loss of tone and increased Irritation constitute the Sictery.

If loss of tone prevails in the Canal, it must especially be supposed to subsist in the Stomach, especially in the Sphincter in its muscular fibres; hence there being in a state of Abney occasion the passage out of Inocula by stool unaltered.

In all cases of loss of tone Purgatives must be abstained, and Opium, by their repetition may favour the increase of Irritability and aggravate the Abney. (he)

The only remedy then is the use of Astringents, for the particular of which I refer you to your materia medica.

Among the Synonyms of Diarrhoea there stands the *Hospitalirrhoea*: This is an obsolete disease that I can learn nothing of. The other is the *Colicæ* which consists of an evacuation of a chyloous matter, common to those cases which I have met with to a Mesenteric Obstruction, and is therefore a symptom of a different disease.

Quibelej
3

Diabetes.

It is not long ago since I thought this to be one of the most difficult diseases to explain, but I hope now to give a tolerable account of it.

Galen treats of this disease as a rare occurrence, but Celsus treats of it and gives us the method of cure without mentioning this circumstance. In the whole however the disease is rare compared with other diseases.

Physicians have given a great number of false facts relating to this disease.

1. They say in Diabetes the drink was accented in the same condition it was taken in. (Pavetoline) tells us he avoided Rhonish wine so little altered that no body would have doubted of it's being so, had it been offered him. He mentions other stories of the same kind.

For whatever you may suppose from the Secrecion of water, or the improper mixture of this, yet, from the passages it goes through, viz Lacteals, Vessels &c. &c. if it possible it should not suffer some change?

2. Another false fact is the suddenness that requires
later

Diabetes

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taken in by the mouth and voided by the Kidnies. From this they thought there was a nearer passage from the Stomach to the Kidnies than by the ordinary rect; and one author even says, that tho' he took his Urine yet the bladder was filled notwithstanding.

3. Another false fact is the nature of the legions voided with the Urine. They alledge that Chyle passes with the Urine, and the English practitioners alledge it to have had a sweet taste. This species I name *Diabetes Anglicus*.

A 4th circumstance respects the quantity. It certainly exceeds the quantity of Ingesta. But we have very improbable accounts of 20 pounds being voided.

In explaining Diabetes I shall confine myself to the subject of the increased quantity of Urine; to point out from what circumstances and causes this increased quantity arises.

1. The quantity of Urine may be preternaturally increased by unusual dilatation of the excretories of the Kidnies. This we can conceive from unusual quantities being taken in dilating the passages. A proof of this is that the Diabetes is a disease of great drinkers, and of those who deal in small liquors, requiring

requiring a small quantity of it to produce the desired effect:

Dilatation of the excretories may likewise depend on the great use of Mineral Waters, for the vulgar conceive their efficacy to arise from the quantity taken in and therefore drink excessive quantities of them & are therefore often subject to Diabetes.

The unusual ingurgelation of liquors therefore, by preternaturally dilating the vessels of the kidneys, may give this disease.

2. But independent of this the Secretories of the Kidneys may be endow'd with too great laxity, by which they admit fluids in great quantities; hence Diabetes has been the consequence of Atonic Gout. — There are other cases where the Kidneys are not affected alone, but in common with the rest of the viscera, such as in general Cachexy. Altho' a ledge the state of the Bile occasions Diabetes, the watery parts separating from the Bile. I know of nothing but Saline matters that will separate the water from the Bile, and this without any taste of Sweetness. He derives his opinion from the Liver being generally affected in a Diabetes arising from Cachexia.

Cachexia is nothing but an incipient Anasarca
where

where the Exhalants are affected with a considerable degree of Laxity, and this is communicated to the Kidneys. Every body knows that Intermittents often bring on Cachexy, and Sydenham tells us that the same Intermittents often produce Diabetes, and there is no doubt but here their operation is in the same way.

3. Increased Secretion of Urine depends on an Irritation or Stimulus applied to the Kidneys. The term Stimulus always conveys the Idea of direct Stimulus, for which reason I prefer the term Irritation.

The Secretions of the Kidneys may be affected with Spasm, in consequence of affections of other parts. This case is not alone confined to the proper Hysteria; for there are many cases of Hypochondriasis, many cases of Dyspepsia where the Spasmodic affection is communicated from those parts to the Kidneys.

With respect to Stimulus we have many instances of it, even direct Stimuli. People with calculi sticking in the Ureters and Kidneys have Diabetes brought on. Hoffman gives an instance of a calculus in the Ureters giving a Diabetes. His authors have taken notice of, and have imputed Diabetes to the frequent use of Diuretics. If indeed Diuretics would operate, as Shore tells us the Colcothem does, by evacuating urine,

two or three pints of water per day, I should believe it; but we know that they possess no such remarkable power. Considering likewise how slowly Diuretics must operate and how soon these and their stimulating effects must be washed off, it is not to be imagined.

4. The quantity of Urine may be preternaturally increased by any means of increasing the watery parts of our blood. The excretion of Urine we know generally depends on the quantity of watery parts we take in: where the quantities between excretion & ingesta are equal we do not call it Diabetes, but it must be a preternatural increase of Urine.

The skin we know can be in an absorbing state. When we find the Urine much exceeds the quantity of ingesta it cannot proceed from the ordinary contents of the body, it must be from some other supply; it must either be from the lungs or skin. This absorption can proceed to a very great degree.

Obstructed Perspiration we know is determined to the Kidneys, and increases the quantity of Urine, so far as these do not increase beyond the ingesta there is no disease. When a great quantity is determined from the skin to the Kidneys, we are told that these suffer debilitation from the large quantities determined

determined there. There are instances of causes producing Diabetes that can be only explained by obstructed perspiration; and cold water obstructs the perspiration and changes the state of the skin to an absorbent state. But we know it can occur, without any cause obstructing perspiration, merely from the increased absorption of the skin.

We may presume in most cases of Diabetes there is great coldness and dryness of the skin showing a languid circulation. It also is much less frequent in a warm than a cold climate; hence it's dependence on the state of the skin. It is also experienced that Diabetics excrete much more urine in the day than at night where the perspiration is more daily kept up.

Any change in the (Dissolution of the Blood, ~~any~~ any change to an aqueous state, may perhaps be a cause of Diabetes; but this state cannot last long and must end in death.

In the colloquial cases of Diabetes I believe that urine is preternaturally increased it does not (not) occur in Scurvy to the excess of Diabetes.

I now proceed to mention a few circumstances relating to the Pathology of this disease.

The disease is Almost

constantly attended with Thirst. This from the abstraction of liquids from the fauces may be accounted for. This is the only account of the Thirst in Dropsy from the quantity of fluids subtracted from the blood.

The *Urdor Uracorum* is another Symptom; which likewise may be the cause of Thirst. But it is doubtful whether we may best be satisfied with this explanation. Where such a quantity is thrown out by the Kidneys there must be a great abstraction from other parts; from the watery parts also being abstracted the remainder becomes more acrid, and this may give the *Urdor Uracorum* and Thirst.

Another consideration is, that while we say there is always accompanying obstructed perspiration an interruption of the passage of the Acrimony, whether the Acrimony which should pass off here is not determined to the Kidneys? There are many cases of obstructed Urine, where the watery parts are not carried off by perspiration, but return to the blood. This may also be the case in obstructed perspiration. —

The Thirst, the *Urdor Uracorum*, & other appearances of colligating and the *Urdor* produced, give us sufficient indications of an Acrid matter being retained & diffused over the system.

Cure.

If the disease depends on the Lymphatic, Hysterical, or Cachectic state of the system, the cure must turn on the nature of the original affection, which therefore does not belong to this place.

We are here to consider the disease as Idiopathic, when it is an affection of the *Medulla Nephrica*. The cure for this principally turns on the restoring the tone to the urinary passages, which they have lost by dilatation or relaxation. Astringent remedies can be more certainly directed to this organ than to any other organ of the body, and hence the use of two Saline Astringents, Alum whey* and Citric Acid water. I should depend more on the former than the latter. A quantity of Alum is added to other means of curing milk.

If the disease depends on a laxity in consequence of overstretching, the restoring the tone by Astringents may be the means of cure. In Hemorrhages we can only expect the action of Astringents in the *primæ viæ*, but in Diabetes we can be more certain of their efficacy, as they easier pass to the *Medulla* beyond the *primæ viæ*. In Hysteria we suspect a loss of tone, and hence Alum may be proper; but if the increased

increased secretion of the Kidneys is in consequence of the determination to the System, if we resist it here before we restore the determination also where we may do mischief and therefore we must take care first to restore the determination to the surface of the Body.

In other cases where it depends on cold and where the skin changes to an ischaemic it is to be done by warm bathing, friction, exercise particularly gestation, and a warm climate.

I had a Diabetic patient residing at Gibraltar, who came to this country in a cold season, which occasioned a Diabetes. I sent him back and he was cured without other Remedies. — But I would always endeavour to restore the determination to the skin before I used other Remedies.

Hygiene

Hysteria.

This is a disease which would afford much difficulty if we were to consider the Theory of it, which however I shall avoid.

In its History it is embarrassed with a multiplicity of circumstances. I shall however first give its history, as this is to be considered as a matter of fact on which every thing in Nosology and Pathology depend. — The Hysteria is represented by a series of Phenomena, the chief of which I have delivered in the character of it in my Synopsis.

It begins with a Murmur Ventris about the Colon: This feeling or pain at the belly makes various convulsions thro' the tract of the Intestines; it at length arises to the Stomach and sticks at the throat for sometimes, occasioning a sense of suffocation in the Upperpart of the Oesophagus or Pharynx, attended with more or less of loss of sense and more degree of larus.

These are the Pathognomonic Symptoms of this disease; but along with these there occur a great variety of other symptoms so different in different persons

persons that it is difficult to say which of them are the most steady. The Strangulation faucium is esteemed one of its most characteristic symptoms. When it comes into the Stomach it sometimes excites Vomiting. It sometimes occasions a Palpitation of the Heart and Convulsions which are extended to different parts of the System, sometimes Apisthotones, sometimes Epilepsy.

A singular Convulsion often occurs in the right hand beating violently against the Breast. Often a spasmodic affection of the Viscera of the Intestines & Sphincter Ani occurs, so as to render the admission of a Glyster incompatible. Sometimes there is a Suppression of Urine, sometimes the reverse takes place.

The fit is generally preceded by frequent fits of laughing, and crying, with frequent fits, from one to the other state, often with false imagination and frequent fits of delirium.

This fit often occurs only once but some are said to have it successively renewed.

(Remote) Causes.

It is liable to be excited by Remote Causes, such as violent Emotions of the Mind, disagreeable odours, by certain Ingesta disagreeable to the Stomach, by any unusual

unusual or suddenly induced fatigue, overeating, exercise, a warm chamber, heat of the sun, warm bath, or any considerable heat, from whence you may see a remarkable analogy with Epilepsy.

The affinities between Epilepsy and Hysteria are considerable; they are related by a similar affection of the Brain & Sensorium - still however we find those diseases entirely separate. -

In Epilepsy the muscles of voluntary motion are affected chiefly. In Hysteria the muscular fibres of the alimentary canal, either alone, or, as frequently happens, with some affection of voluntary muscles at the same time. It most commonly affects women, but I have seen an exact resemblance of it in the male sex. In females it occurs from the age of puberty to 36, more rarely before or after either of these periods. Women are less liable to it as they advance in life. It chiefly attends the sanguine & plethoric temperaments, the Viragines; it chiefly occurs about the menstrual period.

1. It is manifestly connected with the Menstrual flux, rarely occurring before that flux comes on or is about to take place, and much more commonly does not come on till afterwards.

2. It is connected too with the menstrual period, happening oftener at that time than any other.

3. It often depends on an Interruption or perturbation at that time.

Another particular is, that it is certainly more liable to occur in those females more liable to the Nymphomania, and is connected with the Venereal Aphrodisia, and with an excess of Salacity which must impede the state of the ovario in females.

The Hysterical Paroxysm indeed on many occasions seems to be no more than a Venereal Paroxysm, & often has its termination by the same means either spontaneously or artificially induced. Another proof of the same is, that it is connected with the state of the Ovaria, as the barrenness or frequency of women is certainly connected with these parts. Thus women are liable to Hysteria if they do not bear children, though they sufficiently indulge venereal Aphrodisia. Here it differs in the circumstance of determining malus conclusion. For Hysteria frequently occurs when the Menstrue flux is established and after the exercise of Venery has taken place. Hence there is no doubt but the Hysteria coequisita, of which we are now speaking is properly named so, & is strictly an Uterine affection. (The)

The fit is apt to go off by a certain humidity carried off by the Vagina. I imagine they suffer a Venereal Orgasm during the fit, and they often are instrumental in exciting it themselves by a clitoridis titillatio.

Astruc, in speaking of the Liver, says (V. Astruc.) This is a fact that we could not ~~not~~ suspect.

This disease affects Maids more than married Women, and barren women more than others. All this has concurred with Phenomena that every practitioner is acquainted with.

Nothing is more common than to say Hysteria & Hypochondriasis differ no more than their occurring in different cases. Sydenham joins them in one, but Dr Sydenham has described only the Hysteria. — Vogel has neither characterized the one nor the other disease. If he has characterized either it is the Hypochondriasis. — Hypochondriasis and Hysteria have in common a false Imagination and also more or less combined with Dyspepsia; but this is not sufficient to unite them together; they differ in the sex and temperament they attack. There is hardly a fit of Hysteria cognita but occurs in sanguine temperaments. But the Hypochondriasis occurs only

to the melancholic Temperaments. They differ also in respect to the age in which they attack; Hypochondriasis attacks in the decline of life, but the Hysteria occurs from about the age of puberty to 35 years of age.

As to the Dyspepsia it affords a particular distinction. This in the Hysteria is merely coeval with the fit and goes off with the fit; but it is permanent in Hypochondriasis, and an essential symptom in its character.

In fact there is ~~a~~ foundation for ascribing them both under general terms of Nervous diseases; but there is no occasion for this general term unless with a view to the generic practices, but its practice is different in each.

Pathology.

The principal phenomena show a convulsive motion of the Elementary canal; and, if you take the exciting and the predisponent causes, there can be no doubt but this convulsion depends on a plethoric mobility; but I cannot say in what manner the state of the Uterus communicates the plethoric state of the Elementary Canal, or how the state of the Uterus affects this peculiar mobility. It is sufficient that

these facts are established, and these will be a proper foundation for a Method of Cure.

You will every where see an analogy between Epilepsy and Hysteria which are frequently combined. As in the case of Epilepsy it may depend on the Plethoric state, which gives mobility, yet it may depend on a mobility independant of the Plethora from a delicacy and debility. It in many cases it affects the delicate and delicate, tho' it most frequently affects the sanguine and robust. In the former the Convulsions are easily excited, though not so violently, and in those the passions of the mind, as Symptomata (affect), are affected. The affections of the mind occasion all the symptoms of the Dyspnoea, and the Dyspnoea Hysterica is of such a nature that it is difficult which to refer it to, whether to Hysteria or Dyspnoea. - It depends on the degree of mobility and the state of the exciting causes.

It must appear that the Indications of Cure are the same here as in Epilepsy.

Cure.

1. To avoid Occasional causes.
2. To take off the Plethoric state.
3. To

3. To take off the mobility, where a plethoric state is not present.

As to the Practice in the Spasmodism, we find Bleeding may relieve the Spasmodism, and it is necessary to abridge the suffocation they are apt to introduce.

In Plethoric persons, at the first attack, Bleeding may be necessary; but in the delicate, or those who have suffered frequent repetitions of fits, it is improper, and the Observations we made on Asthma will answer here.

In some cases of Hysteria it is proper to open the Belly, but it is not so convenient here as in Asthma, for the Sphincter Ani ^{is} so strongly contracted from the general Spasm of the Intestines that a Glyster is often inadmissible.

The rest of the Practice is by certain Stimulants to remove the Stupor, & by solids & Antispasmodics to overcome the Spasm. These however are of little power and are very ambiguous. It is peculiar that the same Odour that induced the fit, if applied in the time of the fit, often relieves it. The sedative nature of the solid here operates on the excitement which it brought on. D

I now return to the cure out of the fit.

1. We must avoid Occasional causes.

This is an Indication difficultly executed; if the fit is brought on by Venereal thoughts you may judge how difficult it is to restrain these; if in consequence of excess in living, late hours &c it is difficult to prevent these; and likewise if from want of having children.

2. To take off the Plethoric state.

What relates to this I need not repeat. There is one error common in practice from the Hysteria, and inducing Dyspepsia, and from the combination of these it is common to enjoin an Animal diet to such persons and to abstain from milk and vegetables; but an Animal diet I am persuaded serves to aggravate the disease. I have found mercury no conquering the disease, but by moderate bleeding and spare diet constantly employed.

(Where the Plethora is not considerable and there is a suspicion of delicacy and mobility, every degree of fullness increases such mobility, and therefore even in these a spare diet is necessary.

This is our manner in answering the second Indication.

3. To obviate ~~Mobility~~.

This is to be done by exercise, cold bathing, cold air, Antispasmodics and tonics, as in Epilepsy. These however are of little service unless towards the approach of fits: the habitual use of them at other times lessens their efficacy.

When a plethoric state is present, and there is danger of congestion, the application of Tonics may be attended with danger. They are not to be rashly applied till the plethora is in some degree removed. Their chief success is in periodical cases, where the fits have a regular recurrence.

The Metallic tonics are more powerful than the Vegetable. What the effects of Tin are I am uncertain; I have never tried it though recommended by practitioners. I have tried Copper but never in such a manner as might be decisive as to its precise effects in this disease.

Hydrophobia

Hydrophobia.

As I cannot throw any light upon this subject, or offer any Thoughts worthy of your attention, I shall pass it over, leaving you consult Authors who have wrote on it. It goes with accession I insert it in my Synopsis. ————— I am not accurate in ascertaining the particular nature of this disease. I insinuate, in the character of it, that the Hydrophobia depends on an Inflammatory affection of the Gullet; but this is not perhaps exactly true, nor am I sufficiently confident of it.

Order IV.

Vesania.

Vesania.

Every Naturalist has formed a Class or Order on the present Subject. Sauvages has a class of Vesania, but under this he comprehends an order called Hallucinationes; but as his character of this is "ab organorum externorum vitio" it is evident these should be placed under the Locales. He has too another called Morositates, but these ought not to be admitted here because they do not touch the Intellectual faculty. In short of Sauvages's four orders of Vesania, only his third order, inferior Deliria, we should comprehend under this title.

Linnaeus has formed a class of Mentales which are nearly the same with the Vesania of Sauvages; but of his three orders of Mentales it is only the first, Ideales, that corresponds with ours.

Bagel has been more correct. He has a class, Paranoia, which agrees exactly with what we mean by Vesania. Bagel has referred his Paranoia to Adynamia or P.

I am by no means pleased with my character, I

is "Mentis functiones laesa". It is loose; the functions mentis may comprehend most of the affections of the Nervous System, Sensorium, and Loco; but we mean to confine it to affections of the Intellectual faculty only. In confining our order Ursania to the Deliria of Savages and Ideales of Linnæus, we agree with him in separating all those "cum lapsa & cum comata". But they have forgot to separate the symptomatic diseases, and hence my character is more complete as expressed "sine comata, or sine pyroia".—

These writers take in the Delirium Phreneticum & Tumor, but these are Symptomatic affections.

These being premised you may expect an explanation of the terms Ursania &c, and for me to distinguish between sense and madness. Orphreus has given a definition of Ursania. We must refer the error mentis as a common sense aberrant.

We have subdivided this order into four genera. It consists in an imperfection or irregularity of the Intellectual faculty, as these occur in waking or sleep. — Again, the three first of these ~~are~~ distinguished as either consisting in a weakness of the intellectual faculty, which we call Amensia, or in

is an error of the intellectual faculty, which comprehends the Melancholia and Mania.

Amentia.

then disease is the same with the Amentia, Morasitas, Stupiditas, or Fatuitas of Bagel, and is the same with the Morasus of Cennarius & Annosia of Sauvages.

It consists in a want of memory, from the loss of which we cannot exert our intellectual faculty. - We find Idiocy or Amentia difficult to investigate. To enquire into the precise state of the Brain would be a disquisition of the utmost intricacy.

The State of the Brain.

From Amentia occurring with Palsy and diseases depending on Serous Effusions, it may depend on Compression; but Dissections have often shown the Brain in a peculiar condition, viz, soft and flaccid with a considerable quantity of fluid diffused over the whole Medullary substance. If we go farther we might say flaccidity might render the fibres of the Brain and Nerves unfit for their respective

respective functions; and the Brain of children and Idiots confirms this. We must be cautious however how we make this generally the case, for in deficiencies of salutous persons, we have cases of the Brain being remarkably dry and rigorous, and the salutac semis, in opposition to the infantilis, is attended with rigidity of the Brain.

A certain condition in the Brain is perhaps then necessary to our Intellectual faculty, so that a variation from this state either one way or the other may unfit them for this and give the Imbecillitas Mentis; but when such states precisely take place is uncertain, only, the flaccidity of the Brain is much the most frequent. — From the Mania in consequence of fever we may suspect a dryness.

Physicians have generally esteemed the Amentia as Incurable — I shall therefore consider the other cases, viz, where the powers of Intellect remain, but are irregularly performed. —

Mania,
(3)

Mania.

Physiologists have distinguished Mania by the state of Furore, by Audacity, Impetuosity &c; at the same time there is an universal Insania that happens without this furor. Sauvages gives the Mania Iracunda, but comprehends the Tranquilla under the Amotia. Linnaeus has made distinct genera of them, but they only form two species of the same genus. I have only characterized it by the expression of "Insania Universalis," and you will find it nearly universal. There are no precise limits between Mania and Melancholia.

To give any Theory on this subject is difficult. I shall however make some attempt. — I suppose it understood there are two different states of the Brain, viz, Excitement and Collapse. From the state of Sleep and Dreaming we find the different faculties of Intellect can be in states of Excitement and Collapse at the same time. The Delirium occurring at falling asleep, and at first coming out of it, shews that the Intellectual faculties require some equality of Excitement in the different parts of the Brain; and Delirium depends on a want of the due Equality.

equality kept up.

It is evident while Delirium subsists, some degree of collapse takes place and interrupts the due communication of the Brain. — A partial excitement will also have the same effect. It will appear that the regular order and succession of our Ideas depends on a certain measure in the force & velocity in which our ideas take place, and every degree of hurry throws us into a confusion that is no other than a momentary Mania.

It is well known violent Emotions of the Mind will produce this Mania in a permanent degree. — When we perceive the increased Impetus of the Blood in Fever produces Delirium, we must refer it to the violence of Excitement.

In most cases of Mania, in all of the Furibunda especially, a violent excitement takes place, as is evident from the extraordinary increase of strength that appears. A proof of the same excitement is that Maniacs are remarkable for resisting all the powers inducing Sleep, and sustain the state of watching for a considerable period. They have also a remarkable power in sustaining the Impression of cold in resisting its effects. Cold only affects

our System in consequence of its sedative power; it is always a power of collapse, and it requires a strong excitement to resist its operation. On the same principle Maniacs resist all impressions, which is in consequence of the force of excitement rendering their sentient extremities insensible to ordinary Impressions. They likewise resist Opium and Antispasmodics as readily as ordinary cold.

If there is a correspondent tone of Mind and Body connected, the furor of Mania is merely an impression of the excited state of the Brain, and it is evident most cases of Mania depend on this. I believe in all the cases of Insania tranquilla they depend more upon collapse, but where furor takes place it depends on the degree of excitement.

What may be the cause of these states I am uncertain of; some are evident, such as topical affections of the Brain, scirrhous tumours, irritations &c; which may be causes of excitement or collapse; but these it is unnecessary to investigate as they are generally out of the power of our Art.

No these are cases of transitory, so there are cases of permanent Mania, which contraindicates the notion of topical affections. —

Mania

It is of use to know the ordinary Remote Causes of the two different states of the Brain above mentioned. These are

1. All violent and sudden passions. - When these passions sometimes only give Head ach, sometimes Epilepsy, and at other times, Mania, you will not expect that I should explain.

2. All strong passions, particularly grief and sadness, the eager pursuits of wealth, and all disappointments of very keen desires.

3. All intense studies or application of the mind, especially if these are in one train only or much confined to objects of one kind only. - These are the causes acting on the mind.

Those acting on the Body are certain poisons, as those of the Intoxicating kind, and we know that by effluvia we can produce a temporary delirium. These in very large doses have produced a permanent Mania.

I have known Mania frequently the effect of Intoxication. It is often the effect of fever, which has been impeded to a Suppression of the usual evacuations which are determined to the Brain.

Another cause is a Surgescence in the Genitals, which is frequently attended with Mania. What are the

the state of the Genitals that give a high degree of heat I cannot tell. How they produce these different states of the Brain and these unequally is difficult to say.

There are two cases of Mania readily distinguishable. The first depends on an excess of Excitement, the other on an excess of Collapse; the first is the *furibunda* or *communis* of Sydenham; the other is the *tranquilla*.

As to the first it is cured by every means lessening the excitement and diminishing the tone of the system, taking off at the same time the determination to the Brain. Abstinence is therefore here to be presented. If we give them plentiful dilution, the Nutritious matter may be in a great degree diminished.

Bleeding. How far this is an universal remedy, and in what cases of Mania it is especially necessary, is difficult to determine. In the *Mania furibunda* the patient has his intervals of calmness and a sensible diminution of the pulse. Its use is not necessary. If the *Mania tranquilla* happens to the *Plethoric*, Bleeding is certainly necessary, and from the violence of the Excitement they will bear Bleeding to a considerable degree — to a *delirium animi* has frequently been of service. This per-
haps

haps may be a rule to limit it, till the delirium comes on; but Maniacs will bear immoderate quantities without suffering delirium, so that I would never exceed two pounds.

Purging. As an evacuant, and as procuring exclusion from the head, this was formerly held in esteem; and this is the only *modus operandi* of *Pellegrini* &c. which the ancients employed, and of the Acid purgatives employed by them; but of late it is thought the cooling purgatives more frequently repeated, are preferable; such as Soluble Tartar. By acid purgatives we may carry our Indication too far, and though we relieve the Mania, yet we may leave the patient under *Imbecia*.

Cold. This has been found productive of extraordinary effects; there are many instances of Maniacs escaping from their Raptures and lying in the cold who have been cured; hence Physicians have used Cold bathing. The Ancients poured Cold Water on the head for a considerable time together. Van Helmont first introduced this. The time of their continuance in the Bath is not certainly ascertained; it certainly should be long, as they resist cold long, and the Sedative power of Cold has not its effect immediately. It is agreed that they should be kept in water till they have in

ex

in a great degree lost their senses. — We should by all means avoid a train of thinking.

Prodynnes. If it consists in a violent excitement we ought to use such powers as effectually induce collapse, and therefore Opium. About the use of this many disputes have occurred. Where the impulse of the Blood is strongly determined to the Brain, and where the Turgescence and transudation is great Opium is dangerous. In Lucret you have a history of a Cure by Opium.

In the first attack of Mania, if the patient is full and vigorous it is always necessary to premise Bleeding & Purging, but where no degree of vigour appears, and no Plethora, then Opium ought certainly to be employed and is an effectual and safe remedy. — Besides Opium other Antispasmodics have been employed with advantage. Camphor has been of use, but I am somewhat dubious of it. I have still better testimonies of the efficacy of Musth in large doses. Van Swieten gives us two cases, and I believe when genuine it is the most powerful Antispasmodic.

Impression of Fear. It is necessary in many cases to overawe Maniacs, and for this purpose some sort of chastisement is necessary. This is generally

This is generally carried too far; Morgagni mentions a Native whose skull was fractured by his keeper. A moderate degree however is a remedy with regard to the disease.

(Where these remedies are employed judiciously and do not succeed, I am so confident of their general efficacy that I would attribute no fault to the Remedy, but that an incurable topical affection of the Brain existed.

Mania (tranquilla).

Systemham has given us an instance of Mania
frequently succeeding Intermittents, particularly those
that have been treated by Bleeding or other con-
siderable evacuations. Sydenham supposes the former
mania a nimis ——— & morda sanguinis crass;
the other a sanguinis debilitate rapiditate & quili-
nosa fermentatio. This last however is to be cured
by Hemulcants and Tonics.

I said the Amentia may be considered as
a terrible disease, and the Amentia congestiva
may be considered as such. I have met with several
instances of Amentia, and if I were to meet with them
again I should certainly try Sydenham's plan.

While Lydenham took the road at Kenilworth
the bridge

Abunda on Bleeding and Purging, yet in the interval he advises an Electuary with opium and stimulant remedies quia cerebrum corroborant.

This Mania implies some inequality in the state of the Brain that is necessary to form the disease.

There was a Gentleman here, who took it in his head to cure Maniacs; he engaged them in every kind of labour, engaged them at his plow. His medicines were merely placives, and it was merely by this constant train of labour that his cures were effected.

It is obvious there were only certain cases in which this could be applicable, for some cases of the Furibunda are so violent that they are not tractable under a long time.

Restoring the tone of the system by such means may have considerable effect in taking off the inequality of the Brain.

Another distinction is that Mania occurs in two opposite temperaments, the Sanguine and Melancholic temperaments; perhaps these two require different treatments. I should wish to ascertain this, but I own it is difficult. In the Melancholic temperaments Bleeding has seldom been found admissible, unless the Maniacs become furious, when it is necessary. In

In the Sanguine where a Turgescence may be ~~per~~pected, and the frequency of this disease being connected with Epilepsy and Hysteria which occurs in Sanguine temperaments, Bleeding is certainly necessary.

Purging. This as a general Evacuation may be necessary in the Sanguine, and where a particular determination to the Head occurs the Remission of Purging is excellent. - Tho' this does not occur in the Melancholic, yet there is a venous Plethora, and a Congestion in the Vena portarum that renders Purging necessary. Purging therefore is a Medicine that is universally proper, and is the remedy that will best admit of the Interposition of Opium.

Cold. This may seem universally useful. It is certainly adapted where considerable excitement is perceived. In Melancholic cases tho' cold may seem useful yet in general it is hurtful as it increases the rigidity and dryness which are peculiar to that temperament. A proof of this is that we find the opposite remedy to this, viz the Warm Bath, &c. the opposite remedy to this, viz the Warm Bath, &c. great use in Melancholic Mania. The ancients, & among the Moderns Hoffman, have strenuously recommended Warm Bathing; but it is a remedy

to be confined to the Melancholic, and in these to be confined principally to the intervals of the Paroxysm.

Opium has been much disputed with respect to its use here. It is dangerous in Pothoric cases where appearances of Turgeescences and Determination to the Brain take place; but there is less danger in Melancholic cases.

Melancholia.

This I have characterized "*Insania partialis*." It is to be characterized in the same variety as Mania; it may be considered only as a partial Mania.

Every partial Insania may readily pass into an universal, with this difference, that many universal Insanias do not arise from partial, or have not first appeared with partial. All the sudden arising of Manias are in Sanguine temperaments.

Every Melancholia is probably Maniacal which is a degree of the disease.

Dr Boerhaave, who under the title of Melancholia considers it as depending on an Atrabilis, considers Mania as the same disease in a higher degree, says

"Si mania &c." vide his Aphorism. — (But Boerhaave has misread three cases of Mania, and has confounded three different cases of Melancholia).

There is a state of dejection, timidity, and false imagination, that occurs in others not of a Melancholic temperament; these are particular Insanias, and I think connected with different crises of Dyspepsia, and therefore all cases not of Melancholy I would refer to Dyspepsia. The Hypochondriasis has the symptoms of Dyspepsia, but distinguished as occurring in a Melancholic Temperament.

I mean here to consider Melancholia as a partial Insania in a Melancholic temperament, which I say is agreeable to the sentiments of all Physicians. We shall speak with respect to its general or Predisponent cause. — A Question arises, whether it is to be referred to affections of the Sanguiferous, or of the Nervous, System? Had it not been for Boerhaave I should not have hesitated in determining in favour of the Nervous and should not have put the question; but the authority of Boerhaave is not to be passed over. In his 109th Aphorism, after mentioning *Utraculus*, he says "ubi jam in crasse id malum &c." Boerhaave makes all the symptoms mentioned

mentioned in this Aphorism as referable to the
 Attribilis. I say all the circumstances he has men-
 tioned only relate to a particular temperament,
 an hereditary temperament appearing with the blood;
 curled hair, with pale complexion, a ~~small~~ tubet,
 large veins, and a dry rigid & robust fibre, great
 bodily strength, and a proof of the balance of the
 circulation being on the side of the veins. They have
 a remarkable tenacity of all the passions of the
 mind; great attention to one object. These are
 characters of a hereditary temperament subsiding
 without external causes. There are indeed instances
 of a temper of mind, Dejection, Timidity, &c. produced
 by various external causes, but by these causes
 there are no instances of a melancholic tempera-
 ment. Therefore the question turns whether tempera-
 ment depends on the state of the blood or on the
 general conformation of the whole system? Whether
 these are not to be referred to the virginæ Stamina;
 and how these determine the various powers and
 lay the foundation of all the different temperaments.
 I allow there is a different state of the blood in
 the Melancholic & Sanguine Temperaments, a different
 consistence of the blood, but this depends on the solids
 of

or solids or the moving powers.

From Boerhaave you may learn many facts to this purpose, but his causes are mere occasional, and never act but in a predisposition, which I refer to an original temperament.

Here we might Theorize; but as our Speculations would not be very applicable to practice, I omit the discussion.

The Melancholia is often joined with the Hypochondriasis, and that leads to a Specific practice which I have distinguished. I am now to consider Melancholia merely as affecting the mind.

The sure cures,

1. To avoid Occasional Causes.

2. To avoid attention of the mind and any train of thought; to engage them in variety, and any favourable object is to be removed. I find however some difficulty in this, for often if you take Melancholics from a favourite object, and throw them into a variety you are apt to occasion Mania. Van Swieten has an instance to this purpose; a carpenter, while in his own shop and engaged about his work, laboured rationally and executed it faithfully, but when taken abroad instantly became delirious. — It is no

necessary also,

3. To correct the general tendency of the Melancholic temperament, to correct the rigidity & dryness of the System, and especially to obviate a torpid perspiration. — Warm Bathing for this is to be used, and in Melancholia no remedy is more useful. — What ever may be fundamental in the Temperament, yet a torpid perspiration may affect the System. — Sanctorius observed this effect, and hence the Perspiration should always be kept up by Exercise particularly Gestation, hence the benefits of travelling.

It is also necessary to avoid costiveness; this occurs in Melancholics to an extraordinary degree, and this gives occasion to the Dyspepsia, hence the Belly should be kept soluble. Here in the habitual Melancholia, in the partial Insania, mild Purgatives are more effectual than Acids.

The Accumulation in the Venous System especially appears here in the Vena Portarum, and hence this is another reason for keeping the belly soluble.

Samuel,

Somnium.

This can hardly be considered as a disease. It is a vagary of the Soul. I am persuaded nothing is more distinct than the Nature of the Soul and Body; but in life their connections & motions are in a great measure inseparable. In dreaming it is a sign the Sleep is not perfectly sound. Haller says there is, some disease in the Soul, some stimulus applied that occasions *traxmino*.

Every Systematic has taken this in as a Disease, and the Laws of the System requires it.

Dreaming is very seldom an object of Practice. Some habits of Body, and a Plethoric State, may give occasion to Incubus, and some cases of Dreaming.

As to the Cure, I know none.

Class III.

Cachexia.

(Cachexia.)

The meaning of Cachexia is sufficiently explained in the character. It is "Totius vel magnæ partis corporis habitus depravatus, sine pyrexia prima acia vel neurosi."

This as a class is far from being correct. We might expect that the distribution of diseases into classes would readily follow those distributions which we make of the Animal Economy, and therefore Vital, Animal, & Natural.

Our first class, accordingly, comprehends the chief of the Vital affections; our second the Animal; and our third (Cachexia) the natural; but all the natural are not comprehended under this last, for several of them belong to the Neurosis. — Cachexia, and in general affections of the natural functions, but they do not comprehend the whole.

Another view of the Animal Economy is its division into Hydraulic, Vascular, and Chemical. The chief affections of the Hydraulic system are found in the Pyrexia, those of the Vascular in the Neurosis; and the

the chemical, where the substance and matter of the body is changed, in the Cachexia.

Ptyrexia & Yellows are natural Classes, but the Cachexia comprehends diseases that have little affinity. It is not a natural Class, & its Orders are artificial.

First, respecting the distribution of the Orders. The Cachexia may be considered as any peculiar natural affection of the external habit, and these changes must consist either in the different size or different conditions of the surface. A change of figure may also be considered, such as the Deformities of Vogel, but these are only local.

The distribution I have made into three orders correspond with the other Sympomatics.

Sauvages has made five Orders, but his Anthe mescentice and his Tuhora should only form one, and his Impetigines & Discolor should also be in one. — I must observe another imperfection in this one. — I must observe another imperfection in this one. I doubt we have introduced Orders that are merely Symptomatic, & the distinguishing the Symptomatic from the Idiopathic is here difficult.

Another difficulty is to distinguish the Genera that belong to the Locales.

Order 1.

Marcores,

or

Emaciation.



Marcoris.

All Emaciations must be referred to one of two causes, either to loss of fluids or of the Solids. The loss of the fluids is subdivided into a want or deficiency of the circulating fluid or of the stagnant fluids laid up in the cellular texture. As to the solids I believe they have no share in it, the Attrition that has been considered, as the wearing of solid on solid, is very dubious. Our solids have every where so much fluid interposed as to prevent this attrition. All our solids exposed to action have a stagnant fluid covering their surface, and a more or less viscid matter from its exudation of a more or less viscid matter from its own substance preventing their attrition. I am not inclined therefore to admit the loss of solid substance as a cause.

There is however a curious case of the loss of solid substance. It is the case of the solution or washing out of the solid matter of the Bones, as in the case of the French Woman: As to the cause of this we have as yet made no tolerable conjecture!

Tubercles

We may suppose an Acid matter, but how it is applied to the Bones is uncertain.

Emaciations therefore must be referred to one of the two causes of the abstraction of fluids, and these exist to a considerable degree. We can indeed descend on some cases of great Emaciation, but this must necessarily be attended with a deficiency of the fluid in the cellular substance.

So far as I can perceive they are symptomatic of other affections so far we are to exclude Marasmus.

Tubercles

We have retained Tubercles & Atrophia, I have said Tubercles is that "Macies cum Pyrexia hecticâ," the Atrophia is without; but the Pyrexia hectica does not distinguish Tubercles sufficiently — "Sine Sufsi" ought also to be mentioned in the character. The character then ought to be "Macies, Atrophia; pyrexia hectica sine Sufsi."

It is questioned by Physicians whether Idiopathic Hectic exists? Among the species of Emaciations they are all symptomatic. If there is no Idiopathic Hectic there is no Idiopathic Tubercles.

There is a degree of debility produced by Emaciation and that produces Emaciation which may produce

produce the Exacerbation so considerable as to put on the form of a Plethoric.

There are one or two species in which you will suppose this to be the case. There is the *Tuberc Nutrica*, which is attended with a degree of Plethoric. Morton alleges it often arises to a state of Phthisis, that is, the debility is so liable to produce congestions, hence to form Abscesses and Plethoric in consequence.

The *Tuberc Dorsalis* is whenever it proves fatal & forms considerable Plethoric, giving occasion to congestions in the lungs, and ending in a general Phthisis. There is an intermediate state occurring under the first effect of the debility which is the Natural Plethoric. — The Practice must turn,

1. In avoiding Rheumatic Causes and an entire Abstinence from Venery & Lasciviousness.
2. Strengthening the tone of the System. This is to be done by cold Bathing, Exercise, Strengtheners, and by a mixed & copious diet. — This will apply to every *Tuberc* without topical application.

There is another case of *Tuberc* that requires its own

only by the Marcor & Asthenia that occasion it. It is the *Tuberc Mesenterica* of Sauvages. The best account of this is to be found in Junker's 42^d Table of Atrophia. He there observes that the disease begins with a languor virium, an indolence & inattention to all the usual pursuits; this is attended by a quickly proceeding Emaciation before it discovers any other affection. We might suspect, perhaps an affection of the Mesenteric Glands here as in Scrophula, but these Symptoms appear when the appetite is unequal & whimsical. The hectic approaches slowly and discovers itself by restlessness in the night, love of cold drink, flushings and heat in the palms of the hands and flushings of the face - and thus I have seen the disease proceed without the other characteristic symptoms, frequency of pulse, anxiety, changes of the Intellectual faculties &c. I am convinced however that in Tuberc with frequency of the pulse, when no other symptoms are present, that this is to be suspected.

What may be the cause of it is difficult to say. Perhaps Scrophula; but I have seen cases where we could have no suspicion of Scrophula. The most remarkable case I read of it was where the remote cause

cause was conjectured to be from an unusual quick growth of the Body. Whether this can be considered as producing Hectic, Mesenteric, & Nutritional &c, I cannot determine, but I know that quick growing young persons are liable to have their Lymphatic Glands considerably swelled.

From what causes & how it may arise we would wish to learn.

When it arises from Scrophula, the cure will chiefly depend on the cure of that disease; but it will be difficult when it arises from too quick growth. The only way to stop this might be by cold bathing, the frequent use of bodily labour &c, in order to give firmness to the Solids.

Atrophica.

Most of the cases of Maries without fever are Symptomatic affections as evidently as Tabes. This you may observe from the species of Savages; hence the Atrophica Nutritiva, a Vomica, Nicta, Leucorhoea, &c, depending on the coarction of the Serous fluxes.

There is a condition of our System that disposes Men to be lean or fat; and it is impossible to prevent

Atrophia

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prevent this. We may imagine this condition of the System may sometimes be in excess and leave the Idiopathic Atrophia. When this is without topical affection, without evacuations, Hard Labour, &c. or when it is only to be referred to the disposition or condition of the System, I cannot explain. We can observe certain causes that influence these states in some degree, and this is the case with the Idiopathic Atrophia. We can only remove it by a nourishing diet, fresh air, moderate exercise &c.

Order II.

Intumescentiæ.

Intumescenciae.

Here the Theory must be the converse of the former; it must be either an increase of the solid or increase of the fluid parts. The increase of the solids has given us the Section Intumescenciae solidae. The increase of the fluids has given us the other three Sections, viz, Intumescenciae Adiposae, Stultae, & Aqueosae.

Perhaps you might expect that I should take notice of an accumulation of fluids in the circulatory system, and put down the Plethora as an Intumescencia; but this I do not consider as a disease.

I. Adiposae.

Under this I form but one Genus, the
(Polysarcia).

This, whether it can be considered as a disease, is doubtful. In Spain a very moderate degree of it would be considered as a disease; in England hardly any degree of it is so considered. I have added *molesta* to the character. The character is "corporis pingue."

tinguedenosa intumescentia molesta."

Whether should we consider predispositions as they are deviating from the healthy state of the body, should I consider such, I say, as a disease or only so late it is expressed by the natural functions? I would in many cases however consider the *Polyseria* as an object of practice, because there is hardly any disposition of the body that disposes more to diseases, and these of the most fatal kind. In England it has of late become an object of practice. There is one way of certainly remedying it, by using a very saline diet. I am persuaded the Nutritious fluid is destitute of any thing Saline. The Acids have accordingly been used. The Alkalies also are extremely productive of this Imaciation, the Absorbents or Alkalies by being constantly used subtract from the Acidity of the Stomach and occasion this fluid to be much nearer to the Saline state. Upon this is founded the use of Soap. The only safe & proper Medicine for this disease is undoubtedly a spare diet and exercise, for full living is what has induced the disease.

Some objections may be made with regard to Exercise, as it may be said that this disease is often to such a degree as to render exercise inadvisable.

admissible; but I say if such persons will begin with the lowest Exercise and gradually increase it they will at length come to any agility requisite, instances of which there are many.

II. Flatulosa.

That there is a quantity of Air in every fluid of our body is well known. We know that Air from a fixed state may become in an Elastic one, and this in many cases merely by taking off the pressure of the Air.

Pneumatosis.

The character of this Genus is "torporis Intumescentia tensa, elastica, sub manu crispata."

The source of this case may be sometimes very doubtful. It may arise from some connection with the Lungs. We know that a splintered rib has often been the occasion of it; but it is often owing to some singular fermentation taking place in our fluids.

There is a quantity of air in every portion of our cellular texture in all the layers of it as it connects some.

comes of the firmest parts. See Astruc on this subject, who alleges Air may be experienced to exist by applying a candle to any part. There is probably a secretion of Air in the Animal body. There are some particular and occasional Intumescences that may be accounted for by the ordinary habits, that may give Emphysema; but, considering their transitory nature, it is more probable they are only particles escaping from their cells.

Physometra.

This is a collection of Air in the Uterus. — This I mention as a fact in Physics of which I can make no particular application.

Tympanites.

This is better understood. In the Alimentary canal there is a quantity of Air always, and it is easily obstructed. If the Intestines stagnate the particles of the Air formerly divided will collect and show great Elasticity.

This state may be brought on by the use of fermenting liquors. Any man may have a transitory Tympanites from new wines. — Supposing however the

the matter to be the same, the quantity of Air will depend on the motion of the Intestines, it will be more or less generated in proportion to the debility in the Alimentary Canal. This air will either occur in the cavity of the Abdomen or in the Alimentary Canal. The Tympanites abdominalis is far less common than the collection of Air in the Intestines. The Tympanites Abdominalis is of two kinds;

1. From the contents of the Abdominal cavity, as in Ascites.
2. Air escaping from the Intestines into the cavity of the Abdomen. We have instances of Air escaping from the Rectum, in consequence of an Prossion, in the bladder and escaping by the Urethra. There are instances of Prossions of the Intestines allowing the air to escape by slow degrees, and it accumulates in great quantity in the cavity of the Abdomen: this however is not common. More commonly it is from an Strang in the Intestinal Canal. Where this is curable we find it yield to purging and to tonics. The tonics, particularly in the case of children, are of service, particularly the large use of Salt of Steel.

III. Aquosa.

The various Causes of Dropsy.

Dropsy is a preternatural collection of watery fluids in one or other cavity of the Body. By cavity I here mean the cellular texture which lines the Interspaces of parts. The matter is generally of a watery kind. There is a vapour exhaling from every cavity of the Body and again reabsorbed. The sources of this fluid are either from vessels pouring it out, or from vessels carrying it back into the circulation, and none but these vessels are capable of Effusion.

I suppose then Hydropic affections are Effusions of Serum again reabsorbed. When the Secretion or Excretion of Urine is disturbed, it will be reabsorbed or regurgitated by the vessels, and be poured out from various sources; but I say this hardly changes the state of the vessels by which it is effused; it is poured out by the same Channels.

It is a serous fluid. The various appearances it sometimes puts on may give some difficulty, but these

Dropsy is occasioned by

I Increased Exhalation, occasioned by

A Resistance to the return of Venous Blood by

a Obstructions of the Lungs

b Obstructions of the Heart.

c Obstructions of Liver and Spleen.

d The Posture of the Body

e Venous Plethora, from

Obstructed Menstrues

Obstructed Haemorrhoids

Obstructed Serous Evacuations

f Obstructed Veins by

a Polypus

B Compression from

Swollens in the coats of the Vein

Swollens external to the Vein

and Schirrus

or Aneurism

or Pregnancy

D D. Relaxation of the Exhalants

a In Paralytic Affections

b In General Relaxation, as in Chlorosis and Cachexy

E E Increased Proportion of Watery Fluids

By the quantity taken in

By the greater parts drawn off as

a The red Globules in Haemorrhagy

B The Lymph in Serous Evacuations

The watery Portion unduly retained, as in

Obstructed Perspiration and Urine.

2. The Rupture of Lymphatics

3. Increased Exhalation and the rupture of Vesicles and Sacs.

II.

1. Venous Obstruction in parts not provided with Lymphatic Absorbents from

2. Lymphatic Obstruction

In the General Passages

In Particular Lymphatics

3. Palsy of the Absorbents.

these are always in consequence of stagnation. I therefore shall not enter into the differences of the fluids which here occur.

Causes.

1. The causes of Dropsy (vide Table) must be referred,

A. To Effusion in greater quantity than usual or than the Absorbents can take up.

B. To a diminished Absorption. If from want of this it must naturally accumulate.

The effusion may be in three different circumstances.

I. By the ordinary Exhalants, which is much the most frequent.

II. In consequence of the rupture of Lymphatics. As these return the whole of the Exhalation, so, if these are ruptured, there is a constant source of Effusion.

III. Where Exhalation is increased to a degree of producing a Cyst or Sac, which gradually increases; and if this Sac is broke it proves a source of very great Accumulation.

The increase of Encysted Tumours is very gradual & slow, proceeding from the very gradual dilation of the Sac; hence if we open one of these Sacs we find their increase — To return to the

the first of these.

1st By Exhalants. The causes of these may be referred to five heads.

1. Any resistance to the return of Venous Blood towards the Heart. — There is not the extremity of an Artery terminating in a Vein but has an extremity terminating in an exhalant. When we were ignorant of the office of Absorbents and concluded they poured fluids into the Veins and arose from them, we could easily see how venous obstruction should operate on them. Now the Lymphatics are known to perform this office, we give a different explanation. — By the resistance of the Blood from the Arteries to the Veins, it must increase the pressure upon the Exhalants, and hence a source of Effusion.

2. Any resistance of the Secretaries connected with the Exhalants. We suppose an Artery terminates in a vein, into Exhalants, and into Lacteary ducts; hence the pressure must affect the excretories.

3. Cause consists in the increased Impetus of the Arteries. If any cause increases the force of the Arteries in the Veins, and the Veins resist the fluid must be determined into the Exhalants.

Hydripes

4. Relaxation of Exhalants.

5. An increase of the watery parts of our fluids, the vessels &c remaining the same. This being increased, a larger proportion must run off by the Exhalants.

1.st Any resistance to the return of Venous Blood towards the heart. An instance of this is a resistance at the right Ventricle, as stiffened valves, and other causes diminishing the capacity of the Ventricle have been found causes of Dropsy. Also Polypus formed at the Orifice of the Vena cava and any obstruction of the Lungs will produce the same effect; hence in all the different cases of Dyspnoea their termination is generally attended with Dropsy.

Some other resistances to the Venous Blood are an obstruction to the Liver & Spleen. The great quantity of Venous Blood passing through the Spleen & Liver occasion every cause obstructing these constantly to be causes of Dropsy.

Quoting the resistance to the Venous Blood that occurs in the course of the Veins, another cause is when the circulation is weak and the Heart is unable to act against gravity; then in the weak persons the erect posture produces Oedema & Anasarca.

(Pure)

Hydroses

Pure Venous Plethora may be a cause. Any obstruction of the Venses, Haemorrhoids, or even chronic evacuations, by suppressing an evacuation, may occasion a Plethora, and hence Effusions. - But these obstructions produce a very general stasis of the System, and analogous to what we mentioned of the Dyspepsia and Cachexy, where there is an Stagnation in every part of the System. We must find also other causes, as the Schirrosities of the Vena that do not transmit a great deal of blood.

Among the other causes of resistance to the return of Venous blood are obstructions in particular Veins, as Polypi in the Veins, a Polypus near the Orifice of the Vena Cava will have this effect, and Polypi in other Veins, as in the Sinuses of the Brain, will have this effect, and produce the Hydrocephalic state.

The other case of obstructed Veins is by Compression. This I refer to three heads.

1st Tumours formed in the coats of the Veins & obstructing the Blood in the Veins. The Tumours are most frequently external to the Veins such as the Schirri of the Viscera, which, independent of the Stagnation they produce, merely by their compression of the

the Vena Cava, have produced Dropsy. Also the various Glandular swellings, Steatums; the state of Pregnancy also, for the bulk of the Uterus is often so considerable as to compress the Vena Cava and occasion Hydrotical tumours.

Another cause is any compression from the fluids contained; these may occasion pressure on the lower extremities, and hence occasion Anasarca. Hence Anasarca in the extremities occurs in an Ascites.

2. Resistance in the Secretaries.

If there is any suppression of Urine, perspiration, such a retention may occasion an increase of watery parts: but I mean in the case of suddenly taking in a quantity of cold liquors. Here the obstructed perspiration cannot but slowly increase the watery part; but, from the distribution of the vessels into an exhalant and excretory branch, when there is resistance in the one there is exhalation in the other.

3. From increased impetus in the Arteries. —

This may be done two ways.

a. From external violence. — When I find red blood effused the Lymphatics readily take it

up, as in the case of Echinosis.

There are many instances of Precious and Strains laying the foundation of Dropsy. Dr. Monro gives a curious instance of this, from an Ana-sarca produced in consequence of a bruise, by urging the Blood into the extreme vessels as to force the Exhalants.

6. It may arise in Inflammation where there is more or less of Lethargy; and there are some instances where the effused fluids have neither suppurated nor been reabsorbed, and hence occasion Dropsy; Dr Stark gives an account of many tumours, that when opened only discharge serum.

There is hardly any internal Inflammation in the Thorax &c, but a quantity of Serous fluid is found discharged; and, if some circumstances had not occurred, these would not have terminated in Hydrothorax or Ascites.

in Hydrothorax or Ascites.
Inflammations treated by large bloodletting,
by thinning the fluids in consequence thereof &
occasioning them to run off by the Scholante, have
produced Dropsy. — Lymphatics often follow Inter-
mittents, and these I am persuaded occur from the
lungs

loss of tone in the Lachalants.

4th Cause of increased Lachalation is from a Relaxation of the Lachalants. — I was dubious whether to suppose two foundations of the effusion, increased dilatation, or a more formal effusion.

The relaxation of the Lachalants evidently takes place in the case of Palsy. An Anasarca often occurs here, from the palsy being extended to the Arterial System and to the extremities of the Lachalants.

In the state of Cachexia, which can be considered only as a beginning Anasarca, if you consider the causes producing it, which are causes of a general Atony, you will see it is a consequence of the relaxation of the Lachalants. The case of Intermittents must be considered as operating in this way, as likewise the various cases of suppressed Evacuation.

5th Cause of increased Lachalation is an increased proportion of watery parts. It may arise,

a. From the quantity of watery fluids taken in; of which many instances occur. How readily such a fluid may run off from the Lachalants we learn from Dr Hales who opened a dog and fixed a

a pipe into the jugulars; in an hour the Animal was Hydrotic; hence an unusual quantity of watery Liquors thrown into the Blood may produce Dropsy.

6. By those means abstracting the dense parts of our blood; as Hemorrhages, Persecution &c. — If we consider the body as having a certain number of openings or outlets, we shall find a difficulty to conceive how the fluids were confined. It depends on a portion of these fluids being of such a size as not to pass thro' the several vessels. We know the greater portion of our blood is the serosity, and the means of retaining this is from its being accurately intermixed with the lymph and Globules, which, entangling it, prevent its running off; hence an abstraction of these entangling parts may produce Dropsy.

The abstraction of lymph may have this effect more powerfully than the red Globules; There are means of abstracting this lymph separately, as by large Ulcerations; or long continued Issues have been found to produce the same effect. (22) serous evacuations have the same effect, as long continued Diarrhoas, Dysenteries, Diabetae, Menstruus

Altho' &c; not so much in these from abstraction, but by their dilating the excretories, by which means they allow more viscid parts to pass them than in the natural state. — — — — — Probably too all long continued evacuations operate by inducing loss of Tone, and hence a relaxation of the Rebalants.

C. The watery parts may be in a great proportion from a suppression of any evacuation. We know all our Aliment is discharged, and we may consider the excretion of the Lungs and Skin as abstracting a great share; if this is stop'd, the fluids must be confined in the Vessels, and hence other Secretions being denied it passes off by the Rebalants & produces Dropsy.

Formerly Physicians imputed Dropsy to occur chiefly from diminished Absorption; but it occurs twenty times for one from increased Exhalation.

There are two other cases of increased Effusion; One is the rupture of the Lymphatics. We know in the Spleen, where we can observe them better, that such rupture frequently happens, this must occasion a Dropsy in the Lymphatics where the rupture happens. — The other is the rupture of

of Lacs and Vessels, which is confirmed by frequent Observation.

B. By diminished Absorption.

Absorption must be in proportion to Exhalation. The Absorbents take up any fluid effused. If these Absorbents are obstructed the matters must accumulate. Where the Dropsy however is considerable in its progress, it must ~~occur~~ occur from increased Exhalation.

I refer diminished Absorption to three heads.

I. Venous Obstruction in parts not provided with Lymphatics.—Wherever there are Lymphatics the whole Absorption is made in their extremities; but Anatomists have not discovered Lymphatics in the Brain; hence the Absorbents there are extremities of Veins.—We see Dropsies arise in the Brain from Venous Obstruction. In other parts they only operate by increased Exhalation, hence only by diminished Absorption.

II. Diminished Absorption may arise from Lymphatic Obstruction; and Obstructions of the larger Lymphatics or of the Thoracic Duct will prevent the Absorption; hence the Strumous state of the Mesenteric Glands occasions such obstruction.

obstruction. — I suppose the Dropsy may be produced by more partial Interruptions of the Lymphatic System. —

If the Lymphatics formed into larger Trunks in the way of Anastomoses, they would be much more liable to be obstructed by Strumous Glands. It is probable however the Lymphatics have this Anastomoses.

III. From a Stagnation of the Absorbents. — The causes producing an Stagnation of the Exhalants will affect the Absorbents, and hence they may be affected by a common cause. I would recommend to you to turn over to Aiclaud's *Historia Anatomica medica*. Under the different species of Dropsy you will there find a number of Dissections: these I would advise you to arrange under the several causes I have mentioned to which they belong.

I now proceed to consider the several Species of Dropsy.

The several Genera of Dropsy are either universal, as Anasarca, or partial or topical, as are the other Genera. — Every obstruction to the course of the Blood thro' the Heart and Lungs is liable to pro-

Hydromes

duce Anasarca; yet the same is liable to produce
Hydrops Scleris.

With regard to the several partial or topical
Dropsies I have no remark to make: but what you
may find in Authors. For the Hydrocephalus I
refer you to Dr Whist; for the Hydrocele I refer you to
Messrs Pitt, Douglas & Hunter.

With regard to the Ascites it has been divided
into the diffused and the incysted; that is either
where the water is poured out into the cavity
of the Abdomen, or where it is confined in Pess.

As to the Incysted Dropsy we have nothing
new to observe.

It was observed, about 100 years ago, by Dr
Edward Tyson, that the Hydatids contained
Animalcules; which observation since his time
has been well ascertained by Physicians. The
consequence then is that these Hydatids are
the work of that Animal.

Cure.

It is first necessary to take a view of the different
cases of Dropsy, in order to form a Prognostic
which of them are curable and which are
not.

1st Hydrops Hydraladia. (If I may be allowed the Suppression.)

It appears from the first accounts of Dr Sydenham that he opened the part so as to evacuate a considerable quantity of these Hydrals; by which means the wound healed and a cure was performed.

This leads me to think that where Dropsy is encysted (which we can generally judge by observing its particular appearance in one part of the Abdomen, and generally in the Marium, & extending gradually) Aneurysm should not be made but an Incision large enough to evacuate nearly the whole.

Many Dropsies, as they depend on affections not known to be incurable, must be incurable; as those depending on Polypus, on any considerable affection of the heart, as Spissification in the valves of the Heart; those depending on Schirrhosis of the Lung, Liver, and Spleen; those depending on Neoplasms occurring in the lower belly; those depending on rupture of the Lymphatics or of any kind of Hydrals; and lastly those depending on great and considerable obstructions of the course of the Lymphatics; likewise the Strumous Mesentery is generally

a cause of Dropsy & is incurable.

Many cases of Dropsy are ambiguous, as these depending on relaxation; if these are from a general Atony of the system, if this Atony depends on Spasmodics of the viscera, I will not consider them incurable; but if the relaxation is general and not depending on Spasmodics, it will depend merely on the degree of relaxation to tell whether it is curable or not. The same is likewise to be said of Dropsies from Hemorrhages. Dropsies from frequently returned Hemorrhages of the Menstrua, from Diarrhea, Diabetes are often incurable.

Abstracting from this we must be determined by the degree of Debility; as for instance, if this has not proceeded so far as to affect the Assimilative powers the disease is curable, but if it has much affected the Assimilative powers, the disease is incurable.

Lastly. In Dropsies arising from suppressed Excretions or Evacuations; if these last are curable, the Dropsy is so also.

From this it is evident that the Cure must consist either in attempting to remove these various affections, or abstracting from these remote causes,

to consider the disease merely as depending either on an increased Exhalation, or on a diminished Absorption.

The Indications will therefore be either

a. To restore the tone of the Exhalants, or

b. To excite the action of the Absorbents.

It is therefore obvious that when long and great Excesses have produced Dropsy by inducing Debility, and the assimilatory organs are entire, we must restore the tone of the System and crasis of the Blood, by Exercise, friction, Diet, and Tonics. —

There is a means of restoring the tone of the Absorbents and Exhalants by taking off the determination to these Exhalants and to relieve them of the effusion which by compressing and relaxing them may prevent their action. This is to be done by evacuating the present collection directly from the part by Blisters, Issues, or Incisions.

But the application of all these has been objected to as they are liable to induce Gangrene.

It is true they are liable to induce Gangrene; but I say of all these Blisters are the most liable to produce Gangrene and therefore I would avoid those and prefer the others. But Puncturing is preferable

is preferable to an Incision. The fear of Gangrene however should not deter us so often as it does from using the above Medicines; for when Anasarca is attended with considerable degree of Hydrothorax, where the swelling is to a considerable degree, and where it has formed Blisters which are in danger of Gangrene immediately following, and in many other cases, I say Blisters may be used tho' with the hazard of Gangrene.

Instead of beginning at the lowest parts to evacuate the water, it is preferable to begin high up at the Thighs and to proceed lower and lower again.

In the collection of water in the Abdomen or Thorax we attempt the cure by the Paracentesis.

Where the strength of the System is tolerably entire, and the disease is not imputed to any incurable cause, this may be practiced; yet its probability of affording a radical cure is extremely little, for unless we can by other Medicines take off the respective causes we do nothing.

The next indication is to obviate more effectually the return of the disease by evacuating these waters and restoring the tone of the parts by a more general

general evacuation. - These by taking off the determination towards the Solenants give a chance of producing a cure. These are

1. Vomits.
2. Purgatives.
3. Diuretics.
4. Sudorifics.
5. Siccation.

Vomits. There are many instances of cures effected by spontaneous vomiting. This suggests the artificial by Aromatics &c. - I had a patient cured of an Anasarca by a spontaneous vomiting. This however by art seldom answers; vomiting however is one of the most powerful means of exciting the action of the Absorbents, and hence bringing the water into the course of the circulation, which again is carried off by Urine, Stool &c. Dr Sydenham for this purpose used the Antimonial Wine, which often excites the evacuations of Stool and Urine as well as Vomiting.

I know a Gentleman who thought of curing every disease by Tartar Emetic, and had remarkable success in Dropsies: we should practice it often could the patient bear it, but much vomiting is intolerable.

intolerable. For this reason we have recourse to
acid

Purgatives, which, from the water they
evacuate, are called *Hydragogues*. To suppose any
Electric attraction here is exploded. — The limi-
tation of Practitioners, and my own also, has prevented
me from using the acid Purgatives. I believe
much in the efficacy of the alunar Salt is strongly
recommended by Boerhaave, Boyle &c, and I
supposed this was a principal ingredient in
the composition of Ward's purging Powder. The
Stalerium also is certainly efficacious; it is un-
fortunate it is so scarce. Gamboge I believe
when given in small quantities is excellent. —
I however have employed only the milder pur-
gatives. Sassa for instance, whose power I have
increased by additions of Mercury and Antimony.
Some Practitioners have imitated Sydenham in
combining the Emetics & Purgatives together, such
as the *Tulapium Hydragogum*, which I believe
to be excellent.

I believe we are wrong when we employ the
more powerful Purgatives, & allow of too long an
Interval before we repeat the dose.

Of late however the milder purgatives have been found to answer the purpose. Etmur's Symplic & Tartar Regenerat: are much used. In our hospital the practice has been considerably improved by giving the former in large doses, to the quantity of two or three ounces in 24 hours, when it operates very strongly by Urine; and from the concurrent testimony of so many writers I have great expectations of it. —

As to the Regenerated Tartar, I believe from Dr. Fothergill's account that it is an excellent Diuretic and Purgative.

Diuretics. We have no very good diuretics; the most noted are Squills, Colchicum, Garlic, and the fixed Alkaline Salts.

The Squills, where we can manage so as to avoid their operation on the Stomach, operate as Diuretics; they must be given in small doses, for, if large, they operate as Purgatives. They often operate successfully as Diuretics, and often disappoint us. —

Colchicum. This I had a good opinion of and would conceive Dr. Fothergill had not been so much deceived as his Antagonists have supposed. My opinion

of it however is decreased from some late trials.

The Garlic has been in repute, and there are instances on record of Dropsies being cured by it. - It should be swallowed in large doses in Cloves, and it may often prove Diuretic.

Alkaline Salts. These are Diuretic, but precarious. Whether in the Stomach they meet with Acidities that neutralize them, or that they do not reach the Urinary passages in sufficient quantities I am uncertain, as they often disappoint us.

Diaphoretics. Dropsies have arisen from sudden suppressions of perspiration, where the fluids have been determined to the exhalants in the cellular texture; hence Dropsies are more readily produced in damp places. The Absorption of the skin that we took notice of in Diabetes is often a foundation of Dropsy. Sweating then as a salutary Evacuation is indicated here, and it may be made the most copious in the body.

We have several instances of Dropsy being cured by warm bathing; but this relieves so much that its use is far from being eligible. The Bagnio, or dry bath is preferable, and it has been practiced by the means of Spiritus Vine. Dr. Hanra gives us

an instance of a cure of Dropsy occasioned by a Sudorific. I must own that Sudorifics are extremely precarious; but by the use of Dover's powder Dr Wright mentions his performing a cure. I have obtained relief from it also.

Mercury has been employed both as a Diuretic and Purgative, but we cannot easily determine it to the Kidneys. Practitioners however have declined the use of it, as they have alleged it broke down the crasis of the blood; but this is a theory without foundation, for the Mercury after Bleeding constantly exhibits the inflammatory crust, and all the symptoms of increased Density.

This supposition arose when every phenomenon was explained by means of the fluids, but the circulation of fluids is performed 50 times for once by stimulating the excretories without any action on the fluids.

Mercury stimulates the Excretories universally, it may be vomitable, but it may excite a very copious Salivation which however is not to be preferred; for a gentle & constant spitting is best, whilst at the same time the Mercury may promote the various Excretions.

Intumescencia Solida.

Physonia.

I have inserted this Genus purely in compliance to the other. Zootologists; but say it is inconsistent with my general plan, which was to avoid symptomatic affections. If you know the causes of the increased bulk of any Abdominal Viscus, or any tumour in the cavity, you will see the *Physonia* belongs to the *morbi locales*. Considered as a Symptom it deserves your attention, and I would refer you to Lieutaud and Sauvages with his assistant *Physon*.

Bachiler

Rachitis.

I doubt Boerhaave's account of the origin of this disease: I doubt if it is a *Morbus Nervus*.

The first Argument on the subject is that the ancients knew nothing about it; but how few the writers of Antiquity are, and of those few how inaccurate their descriptions of diseases, and how imperfect their writings have been transmitted to us.

There are no accounts of any new diseases but such as are of a contagious nature, where these have been Epidemic and confined to a particular part of the world, and from some accidental circumstances gradually diffusing themselves; but there is not the least suspicion of this being contagious.

That this is a disease never born with children is a fact well agreed on; but there is the large head, prominent forehead, that appears at birth and shows a *pre-disposition*. It comes on according to Boerhaave, about the 9th month, between 9 & 24 months. This is true. I would fix the

the time to the period of Dentition which the
wholly children are always slow about.

Dr Boerhaave derives the cause from cer-
tain conditions of the parents, Excess of Venery
in these, *Lues Venerea* &c; But an objection is
that irregularity in living and of good provisions,
were it the cause, would be confined to people
of high life, but we know it to be more common
among the poor. It has been referred to the use
of Tea, the "*agua multa alida*", but the Rickets
were long prevalent in England previous to the
use of Tea. As to debility in the parents we do
not find that the children of old men have it,
more than those of young.

The venereal disease can never certainly
be esteemed a sufficient cause. I have known
numerous instances of people with a confirmed
Lues, even where the taint was not eradicated,
that have had the most healthy children. In
Italy, where the *Lues Venerea* is so universally
prevalent, and hereditary from father to son,
they are not more liable to Rickets than in
England.

With respect to the diet of *farrinosa*, *Wyzma*,
unfermented

unfermented farinacea; in Asia unfermented Rice is chiefly employed, and in Scotland the children live upon unfermented Bar meal; in which places the children are perfectly healthy.

Boerhaave derives from the authority of Sydenham a Rachitis from Autumnal Intermittents; but Sydenham's contemporaries are silent on this head, and perhaps it was only an accidental connection Sydenham met with.

Boerhaave next mentions how the disease is known, "1.^o ab olate, 2.^o ab causis progressus &c." The rickets may be foretold, but not from the consideration of causes. "N.^o A Tumore, &c." Children are often of a large bulk, & Boerhaave alleges the large head in the Child to be a pretty sure sign; but he has omitted the prominence of the forehead, and the slow closing of the Fontanelle, the union of the Parietal Bones.

"6.^o A tumore abdominis." How the bigness of the belly is to be explained, I am uncertain. The distension of the Viscera or the Tympanites of the Intestines are alone hardly sufficient to account for it, but in Rachitis the abdominal Viscera

are remarkably large, particularly the liver.
 "7.^o A macilentia reliquarum partium, imprimis
 muscularum." The growth is very unequal in
 thickness. Ch. Litron, "The muscles gradually shrink.

"8.^o A protuberantia epiphysearum ad punctura radii,
 ulnae, humeri &c." — it weakens of the joints, and
 larger growth of the Epiphysis than of other parts
 is here a characteristic symptom.

Some other circumstances of the Bones Boer-
 haave has not mentioned, as the various curva-
 tures of the Bones, particularly the ribs and
 curvature of the Spine which Rickets people are
 subject to.

"9.^o A magnitudo Arteriarum & venarum in
 æquilibrio &c." The largeness of the Arteries I do
 not so distinctly observe, but the largeness of
 the Jugular Veins is evident, while those of other
 parts very considerably decrease.

Boerhaave says that persons rickety in the
 former part of life show that deficiency of Nervous
 System that is productive of Wit and Bravery; but
 these are not essential, for there are many instances
 of weakness and stupidity accompanying Rickets.

In his 118th Paragraph he observes the Arteries
 constrict

consists in some fault of the nourishment of the Bones.

(Boerhaave) afterwards proceeds to investigate the proximate cause of this disease.

With respect to his *cacochymia frigida, vapida*, I profess I do not understand. I know no proof of such a state of the fluids in this disease; I say, the Animal Economy produces its own fluids; and it is the general tendency of the Economy that determines the fluids, and we must trace it to the original confirmation.

I think nothing is more certain than that it is not acrimony or lentor generated; but, if from an hereditary cause, it must be referred to the original confirmation. — If this, we certainly will impute the Rickets to the same. It is therefore of little purpose to investigate the particular state of the fluids as it is the action of the solids upon which the disease depends.

I have followed Boerhaave in his account of this disease till he comes to the proximate cause, where I cannot understand his *cacochymia frigida, vapida*. The only part admissible is "*laxa firmarum partium fabrica*," but how does
firmarum

firmarum partium appears more considerable at a certain age. It cannot refer to the simple solids but to the moving powers. There is a debility in the action of the System, a debility of the facultas nutritiva, a defect of proper fluids, a quantity of Oil in the cellular texture is wanting, the Ossification of Bony matter is slow; as to the other Phenomena, the increased Bulk of the Abdomen, Viscera &c. I cannot explain.

I cannot say why Teeth are formed at different times, why the Evolution of the Genitals occurs at a particular period and affects the Voice and system in general.

A late author has supposed the existence of a prevailing Acidity. There is an Acidity in the primæ viæ, but this is ambiguous, and we may as well suspect it to be an effect as a cause. How such a suspect it to be an effect as a cause. How such can affect the Bones is contrary to every analogy of the Animal Economy, nor can we explain the effect of Acids beyond the primæ viæ; even their being evolved in certain secretions is not certain. Whence is this Acid generated? From the Milk they alledge; but the disease is hereditary and congenial to the System, and depends on a peculiar conformation

conformation of the Body, so that the generation of Acidity seems to be an effect not a cause.

Children are every day, as soon as they can suck, admitted to the use of Animal Food, and these are as subject to Rachitis as others, nor are those fed with milk more liable to it than those brought up by hand. — We should also see the disease occur earlier, which is not the case. That an Acid is more likely to be generated in their Assimilatory Organs, which are weak, may be probable; but then it is probably an effect, not have the several Cures for Acidity been effectual.

Dr Boerhaave's cure turns on a drying & strengthening course, with some attention to the *prince vie*. A dryer diet may be admitted, and the use of fermented food. The Aromatics may be added, and we have constantly had in view that though Acidity is not the cause yet it is an effect, a Symptom, that should be abated, hence the use of Rosh &c.

The rest of his drying regimen is dry and cool air and the use of a flannel shift. He advises the Matress to be filled with Aromatic Herbs, "Gestatione."

"Gestatione, concussione, oscillatione" upon the roughest road; much friction with flannels impregnated with drying fumes is good for promoting the action of the Solids and promoting the action of the extreme vessels; applied to the lower belly it may be of use in exciting the contents of the Intestines &c.

Cantharides he advises, but these can have no considerable effect as there is no particular symptom of the disease they are suited to abate. "Emelics, Purgantibus, Pectorantibus," as strengthening the tone of the prima via. The favourite remedy here is Rhubarb, and, of the Acid purgatives, it is the best suited as an Astringent &c. "Exsiccantium, Antispasmodicorum &c." Chaly-

beates have been found useful in this case. Whether Ins Veneris, which is only the Stone mar-
tiales, is of service, I am uncertain. I have employed these, but with no more advantage than the Sal. Martis. The Peruvian Bark was not known at the first beginning of this disease & it would be difficult to give it in a sufficiently large dose. As to the Antiscorbutics the Strady-
maria are not very serviceable. — Boerhaave concludes

concludes with these queries "An et immersio in frigidam prodest? An linimenta? Et quæ?"—

Undoubtedly cold bathing is the most effectual means of preventing Rickets; but whether, when the disease has proceeded to any length, it is applicable, has been disputed. In great abdominal tumours I have thought it unsafe, but I have always applied it unless any degree of fever was present.

To his queries "An linimenta? et quæ?" I can give no answer as I am uncertain.

Order III.

Impetigines.

Impetigines.

The term is not strictly applied. Impetigo, among the Ancients implied a scabby eruption on the skin. Sauvages has extended and generalized it to all the cases. I have extended it to every Cutis deperdata. It is perhaps the most improper to the first genus, the Scrophula; but, to avoid subtile and minute division, I have retained it.

Scrophula.

This is not a new disease. Our observations respecting Bartholin's apply here. The Struma are frequently mentioned among ancient writers. The other Argument of its not being contagious applies here.

The disease is well marked & distinguished though many diseases are confused with it. I shall limit it.

1.st It appears in tumours about different parts

parts of the Body, at first a tumour without a change of the colour of the skin, free from pain and inflammation, generally a moveable tumour under the skin, but not always. It slowly advances to the Inflammatory state, and slowly suppurates, and after the fluctuation it is long in opening & changing to an Ulcer. It is different from Phlegmon in it's being very rarely a pointed Tumour, but diffuses itself, and breaks out by different apertures generally very small. It affords little Pus, not in proportion to it's capacity; it shows a curdled matter like cheese, with a quantity of gelatinous transparent serum soon afterwards appearing on it. The Ulcer thus formed heals slowly and affords little Pus & much viscid serum. The edges of the Ulcers are irregularly circumscribed, so that their figure is irregular; they are flat and smooth and free from callus. They frequently arise near the joints upon the Bones, and from their acrimony affect the Bones with a peculiar caries; the bones become of a spongy texture; yet, different from other caries, it soon heals up.

These tumours & their consequences affect particular Temperaments, persons of a spic complexion, and

and fair hair, though persons of black hair and dark complexion do not escape it; generally however the skin is very polished and smooth, and they are generally persons of a clear and ruddy complexion.—

The disease attacks at a certain period of life from three years to the age of puberty. I have seen it in children of a few months old, but this is very rare. It occurs more frequently from 3 to 7 years than after this time. After Puberty I doubt if the genuine Scrophula occurs. After the age of puberty glandular swellings occur, but these are not scrophulous.—

It is commonly a prelude to Phthisis when these tumours appear in the lungs. At whatever age they attack they seldom continue many years, about three or four years, and, in some, longer, but if they do not take to the lungs at the age of puberty, they heal up.

These tumours occur most frequently in the conglomerate lymphatic glands, most frequently in the neck; whether this is owing to the peculiar distribution of the system I am uncertain. These tumours likewise appear in the muscular parts & between the joints and

Scrophula

31A.

and more frequently, in this last place than between the intermediate Muscles, and they attack the Elbows more frequently than any other joints.

Whenever the swellings appear it affects the person with a thickening of the upper lip which is affected with considerable chapping to the root of the columna nasi, where the ulcerations commonly appear. The disease is connected with the seasons of the year; its first affection is in the Spring and it advances till Midsummer, and then the Ulcers more readily heal up, and the disease goes off in the beginning of Winter; but after the Winter solstice the disease again returns, according as the warmth sets in sooner or later after the winter solstice.

When the disease proves fatal Dissections show the conglobate glands considerably affected; particularly those about the Mesentery; sometimes eroded as the external glands were observed.

The Etiology of this disease is difficult. It is a disease of the whole constitution. There is a particular temperament, a particular kind of life, that favours it. It is an hereditary disease.

Children take sometimes from one parent, some times

derives from the other; this mark of resemblance is particularly determined to the father. This likeness to the parent is particularly evident in this present disease. I know a family where the Scrophula is received from the father, and it only affects those children that resemble the father.

It is possible a father can transmit matter to his children; and it is transmitting not so much a matter as a particular frame of body, a particular temperament.

It is a disease of the lymphatic system. A peculiar Acrimony is here, perhaps, presently transmitted from the parent, or more probably in consequence of a particular conformation is generated. This Acrimony is not known, but it is certain it is not a contagious Acrimony.

Our Indications, from our ignorance of the Theory, are imperfect. They are

1. To obviate a debility & laxity of the System, which appears manifestly to the present.

2. On the supposition of some Acrimony to wash out the Acrimony from the system

1st To obviate a debility & laxity of the System. The Germanian Bark has been much commended, but

but it has not answered my expectations.

Dr Fordyce has recommended it in the London Medical Essays, but I question if his cases were truly Scrophulous. Dr Eberle also and Dr Ward inform us of the Utility of the Bark, but the quantities are so small that the cure may be imputed to some other cause. If the Bark is useful we might expect good effects from other Tonics, of which Cold Bathing is the only efficacious one.

2^d To wash out Acrimony from the System.

This is done by drinking plentifully of water. Mineral Waters have been tried, but waters of different degrees of Impregnation have been found equally good, so that a great deal may be referred to Elementary Water. Sea Water is more effectual than any other: it is the practice I have depended on. I will give you two or three observations concerning the best manner of using it. There is no occasion to go to the Sea shore. It may be transported and kept in good condition for a long time, and the Sea air is of no great advantage, so that sea water alone may do as well; and therefore those who cannot conveniently transport themselves to the sea may have it at home with the same advantage. They also employ it

it with greater success than people at the shore; for the water gathered on the shore is mixed with the effluvia of Beiers. I always order a Boat to go out and take up the water within an hour of high water:— With these managements people drink it with advantage.

I seldom enjoin sea water alone; but commonly dilute it with a quantity of fresh water; this is for the purpose of dilution which could not be so well performed with sea water alone. By this means the bad taste and thirst the sea water alone produces is taken off. Sea water has been given as a purgative, but it does not then answer the purpose of reaching out the system. What will not keep the belly open is sufficient, and is the quantity I always order.

This is the most effectual cure of Scrophhula which I for thirty years have observed, joined to cold bathing. Some, not contented with sea water, cry out for drugs; with these I substitute an artificial sea water equally effectual with that of the Ocean, viz. by adding Glauber's Salt to sea water diluted with four or six times its quantity of water, and giving it so as to keep the belly open. — Licita
and

and *Tussilago* have been employed.

Cicuta. Many ^{that} do not admit the efficacy of *Cicuta* in cancerous cases allow its use in *Scrophula*, but I have never found much success from it.

The Tussilago. Its operation I cannot explain. I employed it from Dr. Sutter's recommendation in his *Medicina Gymnastica* who gave it in strong decoction. In open *Scrophulous* Ulcers the *Tussilago* seems better adapted than the Bark. I think it is very benificial in these; it heats up the Ulcers. I have taken the expressed Juice & sometimes strong decoctions. When the season allows, the expressed Juice is to be preferred, at other times a strong decoction is to be taken.

Syphilis

Syphilis.

This and the Gonorrhœa are not to be separated. Syderologists have referred Gonorrhœa to local affections, Syphilis to universal.

The local ailment is generally first in time so I begin with it. This local affection is either Chancre, or Gonorrhœa; but as the Chancre requires the same treatment as the Syphilis I shall begin with the Gonorrhœa.

How the matter affects the Mucous Glands is a point not ascertained. The nature of the affection is much disputed; formerly it was supposed curing to an Ulcer, but at present Physicians consider it as no ulceration, merely as an increased discharge from the Mucous Glands. . . . You therefore have been many opportunities from dissection to discover that those persons living under malignant Gonorrhœas had no ulceration; as Dr Hunter from numerous instances informs me.

There are many Gonorrhœa benignas with such symptoms that they cannot be affected with an Ulcer. I have known an instance of this Gonorrhœa

: has remaining for 40 years.

People, from excess of venery joined with drinking, may have a Gonorrhoea resembling in colour the matter of the Venereal Gonorrhoea, but distinguish it by its soon going off.

A Gonorrhoea, though remaining for a considerable time, does not readily produce ulcers; there is here no evidence of an Ulcer, the absorption seems to have an exclusive attraction for the former and none for the latter.

I conclude: therefore there is no Ulceration in a Gonorrhoea, but its long continuance & constant Inflammation may sometimes produce Ulceration, which have been found in the Urethra, but never but from such circumstances. How is this matter produced? The common notion is that a contagious matter is introduced affecting the ducts; but the particular matter does not so much depend on contagion as in an Inflammatory affection of the Mucous Glands.

The Cure is Prophylactic or curative. The former is a desirable object; but there is no application that can be a probable means of washing out a matter that must have penetrated beyond its reach

reach. Therefore a priori I conclude against Prophylactics. How far the caustic alkali may be of service I cannot determine.

The cure I reduce to this Indication—

The discharge of the matter depending on Inflammation excited in the mucous glands, the first Indication is to Remove the Inflammation.

Here Bleeding is properly promised; and, in the vigorous, repeated & considerable bleedings. But in the case of local affection we know general bleeding can have but little effect, and hence I prefer topical bleeding. This however is a troublesome application and the bleeding of a Leech on the Penis is difficultly kept.

The auvidina, Heat & Wine, & living in a warm spare diet, has alone proved a cure.

Purgings has also been employed and those of the Acid kind were employed by Sydenham and Boerhaave; but the Drastics irritate the Rectum, which is communicated to the neighbouring parts; wherefore the Neutral's should be employed.

2d Indication, To avoid Irritation.

The Urine stimulates the Urethra to a great degree, and

and this should be taken off by a large & plentiful
dilution of the Urine. We use the Mucilage,
with propriety, but the dilution performs the prin-
cipal effect. In these methods we inject oil
into the Urethra, but this is of difficult adminis-
tration and does not often succeed, as the intro-
duction of a pipe gives occasion to great irritation.

Another means of restraining Inflammation is
the application of Poultices of *Acetum Saturni*
to the Penis. I have frequently found the use
of this in all Inflammatory affections: the poultice
is to be mixed with a strong Impregnation of *Ac-*
etum Saturni, about ten grains to the ounce. A
Surgeon lately in the country has in pursuance to
my advice performed a great many cures by the
Acetum Saturni.

Under the Irritation we must consider the avoid-
ing Discharges. Nothing ought to be more carefully
avoided than all causes exciting this, as libidinous
conversation and thoughts; conversation with women;
bodily exercise; but the patient should use no exer-
cise at all, not even gestation.

Silber is an useless remedy; it can only operate
as a diuretic and increase the quantity of Urine, for

as a Refrigerant the supposition is ridiculous.

From these Antiphlogistic Remedies if the odor Urine goes off, the disease is cured, and even after the flux spontaneously ceases, we find gradual changes in the nature of the matter discharged, a change of consistence &c.

The disease however sometimes cures without these changes taking place, and when the green or yellow colour remains I do not consider it as a mark of the subsisting virulence.

This spontaneous abatement of the Inflammation however is always esteemed a cure of the disease, for the discharge subsists which seems to depend on a relaxation of the Mucous Glands. Now this is incompatible with the state of Inflammation I cannot explain: But many cases of this kind may be cured on the supposition of relaxation without regarding the virulency. We are apt however to suspect a Virus, and use Mercury. Though I think the cure may be better performed without, yet Mercury has certainly expedited the cure, and in all obstinate cases this should be tried. Theunction has been used, but the Injection is preferable, by increasing the discharge and more speedily destroying

discharging the virus. The crude or triturated Mercury are to be used with oil and seldom prove irritating.

Salomel is not to be used, for, in whatever fluid it is blended, it is deposited again, and occasions, troublesome affections in the Urethra, occasions suppression of Urine &c.

Injecting Corrosive Sublimate is the best means of curing a Gonorrhœa. But this must be used with caution, yet the impregnation must be so strong as to irritate the Urethra, or it proves useless.

The raising a certain degree of Inflammation often cures a Gonorrhœa. I have known many instances of persons riding post, and by thus inflaming the Urethra, are quit of the Gonorrhœa: the explanation of this is uncertain.

The Balsamics are all irritating & inflammatory, and hence inadmissible; but, if they do effect a cure, it is by irritating and inflaming the parts, analogous to the former observation. Cantharides, if good, must depend on the same principles.

Other remedies may be referred either to this view of the disease or the notion of lacerity.

Copper is, in this respect, ambiguous, whether it acts

acts as Inflammatory or Astringent. — By Astringents, as White Vitriol & Lead, a cure is often effected. By the Ictus, but Saccharum Saturni is a much safer remedy. I am cautious of applying Astringents, and never but when there is little inflammation and manifest symptoms of relaxation.

If Astringents produces a sudden Obstruction & Inflammation they produces permanent consequences and occasion swelled Testicle &c.

The swelled Testicle arises in consequence of Inflammation extending along the Urethra to the Vesicula seminales.

Many pretend to cure Gonorrhoea by Astringents early applied. Whether this is in danger of hurrying the infection upon the mass of blood I cannot determine.

Chancre.

This gives the only opportunity to absorption, & only affects the Blood. The Blood must unavoidably be affected in the case of Chancre, and this is only to be cured by eradicating the Infection, and it requires the same treatment as the universal Lues.

Even in cases of Gonorrhoea there may be slight recrudescences

excoriations that may give occasion to absorption. In the local affection it is said that the absorption, whether arising from chancre or internal ulceration, seldom affects the mass of blood without producing Bubo; but I am certain it is not always so, and therefore let no one be in security of the affection of the Blood till a Bubo appears.

Some have supposed the matter communicated to the Inguinal Glands may be stop'd & there accumulated; but the Bubo being a glandular affection the matter is easily transmitted, and there is no reason to suppose a perfect accumulation there, and with the suppuration an entire evacuation of it; for I have seen many instances to the contrary.

We know if the Bubo has not the constant application of Acrimony, i. e. if the Chancre should be cured, & no supply of Matter is transmitted to the Bubo, still the matter will be diffused in the general system, which is a strong proof against the perfect accumulation of the matter. The suppuration of Buboes is ineffectual in eradicating the poison out of the blood and the same medicines must be used as if it was not to suppurate. The Bubo, when opened, is very difficult to heal, and is very troublesome.

troublesome: Whencever therefore it can be repelled I should always prefer it.

Whether should the chancre be healed up by External Applications, or wait for its healing up by Internal Medicines?

The Contagion of a chancre is constantly multiplying the infection; every part of the matter is absorbed and accumulated in the blood, hence it should even be healed up.

When the chancres are mild they may remain till they give evidence of an internal cure; but when they are considerable, with great erosion, much Inflammation, they should be healed up by external applications. — In general then I am inclined to heal up chancres quick, and afterwards continue the exhibition of medicines till the cure is effected. — Keeping the chancres open to determine the nature of the Infection is not necessary, for, if I heal up one, while the disease remains others will be breaking out.

For the cure they require Mercurial Applications. Many yield to the common Mercurial Ointment, but the most effectual remedy is dry Precipitate. We should however confine the precipitate to the ulcerous place by means of

of

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of a Canula. Sometimes they are treated by Sacch. Saturni, but this is not to be depended upon.

Buboes.

We need not be anxious about this suppuration, but this if possible should be avoided. There is a certain state that must come to suppuration; I never found the suppuration of Buboes promoted by any sort of (Fomentice). The most effectual means of discharging them is by dry cupping. Whether Mercurial Ointment discharges a Bubo I am uncertain. But rubbing the neighbouring parts in the course of the Lymphatics may be attempted, so that, if it does not disperse, it acts particularly by entering the mass of blood.

Treatment of the Lues as affecting the Loss of Blood.

We do not pretend to judge of its peculiar nature. An opinion has prevailed from Boerhaave that the matter takes much to the Bile part of the body; but we have more direct proofs of its taking to the Mucous parts. — 99 times in 100 it appears in the Mucous Glands, the tonsils, or in the Salivary glands. — What favours Boerhaave's supposition is its attacking the Bones, but if so it should join Spina ventosa, i.e.,

i.e. it should affect the Internal Periosteum, and give the Spina Ventosa, whereas it attacks the external Periosteum. The Scrophula, too, often attacks the Bones but without suspicion of affecting the oily matter.

Mercury is the cure for Lues, & Mercury is the only cure for most diseases affecting the Sebaceous Glands, and they also as much cured by that also as the Lues. But whatever is its nature it is to be cured by Evacuations, either by a total change of the fluids or an evacuation of the Excrementitious fluids; hence the most universal Evacuant, and which extends to the seat of this distemper, is Mercury.

Mercury has been supposed not to operate as an Evacuant, but is an Antidote; but this is its foundation, and there is no proof of Mercury ever curing it but by an Evacuation. If Mercury sometimes, as an alterative cures it, it may be accounted for by its curing by Despiration alone, which Mercury as an alterative forwards.

By whatever other means it can be cured it is certainly cured by Evacuation. . . . Mercury does not act but in a saline state which may be procured by

by simple triture, calcination, or by different Acids.

The preparation by Triture is the mildest, & that by Acids is the most Acrid. These by Acids differ only in degrees of Acrimony. The choice in practice must be of the mildest, or most acrid. The mildest are not effectual unless they are introduced in considerable quantities. But this is inconvenient as the mouth becomes affected. The Acrid as more general stimulants ^{may act} by Perspiration chiefly, or as Turbich's without affecting the Salivary Glands.

If thus we can endeavour a cure it is with less trouble than in the other case. This touches the use of Corrosive sublimate, which often operates as a Diaphoretic, or Sudorific, and, when it does so readily, it will cure the disease.

There is great fallacy in the choice of the Sublimate, and to this I would attribute its frequent failure.

It is only in its most acrid state it can operate in this manner. If two sorts sent me by Sir John Pringle, one was very effectual, the other less so. One was from an Apothecary at Hull, and the other was from a private Chemist. The latter was far more Acrid, and only in this state did it operate.

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The milder preparations may be employed with great advantage. Whether should we employ triturated or saline preparations of mercury? The former are preferable as by this you throw it into the mass of blood and operate by sweat &c; whereas the saline are very apt to operate by stool. Even the precipitate from Calomel with tartaric alkali is apt to purge.

Whether should it be given by the skin or the mouth? The latter is best, as by the former it is much more difficultly conducted. It is true the Mercury internally exhibited is liable to purge, which Union is not; but a moderate quantity of opium checks the tendency to that and confines its operation to the blood.

Creyer's practice, of triturating the mercury first by itself, before we join it with any substance is best, and by this the whole is reduced to a black powder. This indeed is difficult to do except in large quantities. Creyer triturates his Mercury by a horse. It is so given till it affects the mouth; not that salivation has any advantage, but till it affects the mouth we have no security of its being sufficiently active. How it affects these glands has been

been a subject of much dispute. I imagine that it is by its quantity proving a Stimulus. It affects the mouth by taunting the breath, loosening the Teeth, &c. Nothing further is necessary for the cure of the most obstinate pox; and, when Salivation is quickly produced, we must not think the disease cured, but stop till the salivation is abated and then repeat the Mercury in such doses as the patient will bear.

A man was early salivated by Mercury, before he had taken many grains; for the space of three weeks he spit from two to four pounds a day; but we could not depend on this cure; for, notwithstanding this degree of evacuation, in a month his Symptoms returned and a Corona, that he had, came back, and he was as bad as ever. We should keep up the evacuation by perspiration in full flow from three to six weeks to obtain a cure, and during this time the salivation need not be more than sensible. As to the use of Sarsaparilla, Sygarin &c. I have no experience of them. I have no particulars to offer you with regard to the other symptoms.

Secretulus.

Scorbutus.

Practitioners formerly confounded every supposed acrimony of blood under the name of Scurvy. At present Physicians have agreed in simplifying this matter, viz. that Scurvy is confined to the Sea Scurvy, and is discovered by its causes & symptoms as expressed in our character, and there is no evidence that it ever arises but in consequence of salted food, and is distinguished by symptoms of lassitude, swollen and flacid gums liable to bleed, jaundic breath, various spots and erosions on the surface of the body. With regard to the great varieties of this disease I refer you to Dr. Lind and you may read Dr. Keil who has offered facts worthy your further enquiry.

The cause of the Scurvy is disputed, but it is agreed that the use of an animal diet solely has considerable effect, and it is probable, a priori, that in a deficient state it has a tendency to introduce, as we might suppose the cause: — But a diet of flesh & blood alone has had no proof of reducing Scurvy; so that it is an excess of animal food approaching to a putrid state. But we have no clear facts to show this

this to be the common cause of Scurvy; and we see it must be salted food in a putrescent state.

The use of Putrid Animal food salted will not readily produce Scurvy, unless there occurs suppression of some usual evacuations that take off the saline parts of the blood. This Dr. Hulme has insisted on, when he says it does not occur in the Torrid Zone; but I have heard instances of its appearing in the Torrid Zone so that I would not be so positive in my conclusions as Dr. Hulme. But it is certainly much in proportion to the suppression of perspiration. In a number of men on board a ship, the indolent and sluggish are always first seized, so that it is animal putrescent salt food in a cold climate unfavourable to perspiration that principally produces the disease.

Proximate Cause.

When animal fluids are constantly going to an itescent state that is a quantity of saline matter that must be discharged or produce the disease.

In the progress towards putrefaction there is an Ammoniacal salt, evolved from the blood. Putrid matters evolve such a matter as is evident in the production of Nitro.

We can perceive that the progress of all matters towards putrefaction is attended with the evolution of a saline matter, appearing in an Ammoniacal salt. This is evident from the experiments in the generation of Nitre; and from the History of the Animal Economy. Many matters appear in the Economy different from what we find in our Aliment; a different acid appears, viz. Acid of Phosphorus, which is combined to a Volatile Alkali and forms an Ammoniacal Salt. This is called the Essential Salt of Urine, and there is a constant production of this in the Animal Economy, and hence a necessity of its being thrown out by Secretion. Hence I impute the Primæviæ cause of Scurrey to be a superabundance of the Ammoniacal Salt.

Throwing in a great quantity of saline Alimentare matter will increase the production of this Salt. Physicians allow that the long continued use of Alkalies or even of Absorbents effect the production of the Ammoniacal Salt. — Overhauser says common salt suffers no change in our system.

Any fixed alkali by combining it with Spirit of Urine and Volatilized Tartar can be changed into Alkali.

Ammoniac, and the application of the Inflammable matter constantly present in our system may easily effect the change from a fixed to a volatile alkali.

This Ammoniacal salt is the chief means of the fluidity of our blood, hence we account for its diseased state in Scurvy it being opposed in the cellular texture, or liable to be so easily evacuated in Haemorrhagy.

Why this state of the Blood so constantly affects the Mouth; the Saliva contains a large proportion of Ammoniacal Salt, and an unusual quantity of this salt passing by the Saliva excretes and gives a peculiar tendency to the increased virulence of the gums. Whether there is any thing weakening the simple solid or some sedative power weakening the moving powers seems probable from the debility that prevails.

The Preservation and Cure of this disease is now so well known that I need not mention it.

The Prophylactic is entirely founded on our knowledge of the Premises causes; and the cure turns on a recent vegetable diet, for the prophylactic farinacea do not answer the end. Dried herbs

herbs will not do, though perhaps if their quantity had been sufficient they might have answered the purpose.

The Succulent Herbaceous parts of Vegetables, Herbs, or Fruits, should constitute the whole diet; and joined with these every means of facilitating and supporting the perspiration.

Elephantiasis.

The accounts we have of this were from writers before the restoration of Letters. The best account is in the London Medical Essays from a Surgeon at St. Giles in Clerkenwell. There is a great resemblance between the state of the blood in this disease & the Scurvy. It is aggravated by the use of Mercury.

Leprosy.

Framboesia.

Trichoma.

These diseases I have never seen, nor can I learn any thing from Authors.

Interus,

Icterus.

With regard to this disease the system is generally understood, though not accurately and exactly. I shall deliver myself very shortly on that subject. I am not to treat of the Muriço of Sauvages tho' it is the genus under which he comprehends his Icterus. This genus is distinguished merely by the yellowness of the skin, but this may be complicated with different circumstances of the system, as the yellowness in the second stage of an Echinism, which is manifestly from serum and not like Bile.

The case we are to treat of is a from Bile diffused over the system and deposited in the skin. It is distinguished by the yellowness affecting the conjunctiva of the eyes and appearing most manifestly in the Urine. There have been disputes with regard to what species belong to the one and to the other. Those depending from certain Diseases, and Few, are generally from serum diffused, not bile.

I am to treat of Jaundice as depending on Bile taken from its ordinary receptacles and diffused through the system. I take it for granted that there is no Bile in the Blood previous to Jaundice.

therefore this disease is not to be imputed to an want of Secretion, but to an Interrupted Secretion. This must depend on an obstruction of the ordinary Secretories, either of the Ductus Hepaticus or Ductus communis, which last is most common. The Gall-bladder having no Bile put from the Liver, as Ab- sorption from that vessel would scarce give quantity, its quantity being too inconsiderable for that purpose. An obstruction in the cystic Duct may also affect it when it runs down as to pass on to the hepatic. When the Excretion of Bile is obstructed in either of these ways it has been a question how the Bile gets into the Blood, whether by absorption or Reabsorption? I think the latter; but as it is a matter of more Curiosity than Importance I shall not enter upon it.

The causes of Obstruction may be various.
1st Any kind of Tumour in the Duct itself or Duodenum, or neighbouring parts, may give occasion to the destruction of its cavity, or independent of the duct itself it may depend on various external compression on the liver, and have instances of Tumours of the Liver co-

as to prove on the Hepatic or Biliary Diet.
These two last causes I think are incurable, or
at best extremely doubtful and precarious. I
refer you to the common writers for what can
be done in this case.

However I am concerned with a disease of this
kind, whose intermediate cause is doubtful, I
hold it as a rule to reject these, and to ground
on the supposition of the disease being from
remote cause.

The proximate cause may be of two kinds.

1. A permanent affection of the Lungs.
2. A temporary affection of the Lungs.

With regard to the first I think I may take more
than two above. I think I may take more
of the insect, as before, and the continuation of the
disease, and these can produce the disease
the secretion of any obstruction in the Lungs.
Therefore I think there can be no doubt that the
is the cause, but these causes are most very
likely, and is generally a permanent and very long
disease, and however clear the case may be
according to itself, it will seldom be a simple

and Gravel.

The more common is the second kind, viz. the
 swelling matter, which may be of different kinds,
 but is generally anorethone found in the Piles,
 which we may call Calculi. These are the most
 frequent causes of Haemorrhoids, as since we have ob-
 served more to this disease we always find one
 pushing off at the going off of the pit. This was
 universally found to be true, at the first ad-
 vance of the disease, about 30 years ago. That it
 has since been totally neglected. This is likewise
 confirmed by the examination of persons dying
 of this disease. I too concluded that in the case
 of Hemorrhoids, a supposing it to have existed a very
 long time, it must have brought on some other
 disease. Hence when there is the least indica-
 tion of the supposition of Calculi. I imme-
 diately proceed on the supposition of Calculi. I then
 observe there are calculi and there we not only
 Hemorrhoids may be cured by the discharge rather
 being pushed back from the rectum into the gut and
 then from the large haemorrhoidic contraction of the
 gut.

These flows we find a very important
 figure in that from a more attention of the disease

position the water may be allowed to pass. It
again, the weight of the bile accumulated in the
ducts may dilate these ducts so that it may dis-
cuss pass out, without increasing the time of pass-
age. Hence there is no certain proof, even from
there not being found in the livers, that the dis-
eases did not depend upon calculus. They may
be a such a thing as not a part of the liver.

I therefore consider the jaundices, when
there is no other evident cause, as depending on
stones, and to that view direct my view.

The most obvious Indication seems to be to
dissolve the Stones; but this seems to be after Vi-
ces. They are not touched by lime water, Soap, &c,
sometimes even not by the strongest acids
alkali. When a solvent is not commu-
nion, and if there was here a great quantity
to convert it in quantity or quality sufficient
to act upon the Stones. No remedy has
not forwarded that in any one case we have dis-
covered an Urinary calculus which is not re-
solved, but aim more at softening the
Indications than just Stones. —

I must observe here a consideration that is connected with this, by an Indication of preventing the Disease by obviating the Cause. I have known persons from time to time labour under Scurvy and often from Biliousness. It may be thought that we could remove this, and we know so little of the circumstances of this that we cannot tell how to do it. Physicians have spoken of Linseed and other vegetable juices for this purpose, but I find no evidence of their power in this respect. I have known great quantities of Linseed employed without effect. Hence we do not know how to obviate it. Our only Indication therefore must be to promote the passage of the Urine through the Duct. All Obstructions in the Urinary Tract are very possible, and hence, if Arcking now: can be applied slowly, it is inconceivable to what a length they may be diluted. Hence therefore we cannot but the dilatation required may take place, and might employ every means to remove it.

The Scurvy comes of them taken, and is then, 1st Inflammation excited by the Urine & 2nd Inflammation of the Urine by too much dilatation, and hence

of the duct being diminished by its membranes being thickened the secretion of the Saliva is prevented. Hence it is that we find Jaundice ushered in with severe pain in the Præcordia, the seat of which is different in different persons both from the variation in the seat of the disorder, situation of the Gall Bladder, and the want of distinctness with which we characterize all internal impressions. When this occurs it is commonly attended with other marks of inflammation, as frequency & largeness of pulse, &c. &c. hence Bleeding is necessary, & which will be more certainly performed on the approach of a severe fit as we are certain of the disorder & the blood is rky. For these reasons I lay it down as a Rule that when Jaundice is ushered in with pain, Bleeding is always necessary.

2^dly. Spasms affecting the Duct.

Tho' we do not as yet understand the true cause degree of irritability of the Nervous System and the Duct they are certainly related to each other in some degree. Therefore numerous Symptoms of Spasms are present and without other obvious Symptoms of inflammation, or when the inflammation has been abated by Bleeding we must take care

Spasm, the only remedy for which is opium. This is useful in the beginning of Biliary Colic, for there is no doubt but that Spasm will increase the Inflammation. Even with considerable suspicions of Inflammatory opium is to be employed.

The late Dr. Haug in his Treatise on Opium says, that it is rarely preceding and opium is indicated in the same case; but the transmission of Bile combine these seemingly opposite remedies.

Besides these we would by all means attempt to relax the ~~spasmodic~~ parts by external Stimulations, by which, if they do not penetrate far, some benefit may be obtained. A suppository inserted into the Colon may be of service. These are the means we employ to favour the relaxation of the Duets. This supposed done, we must take measures to promote the passage of the Stone, which we only two;

1st By Vomiting.

2^d By Purging.

Vomiting I think most preferable. It operates by pressing on the Duets of the Liver & the abdominal Muscles and Diaphragm also and upon

and squeezes the viscera as in a press. In these two cases vomiting may operate in the passage of a Stone. Vomiting has been supposed dangerous in some cases. There are indeed instances of the Gale Bladder's bursting, wherefore am not averse to being cautious; but yet our fear may be too great. I know no instance of a rupture of the Gale Bladder not when it has been under a great degree of tension for a long time before & partly cured. I have known Emetics given in 100 cases without ever having any cause to suspect any bad consequences. — Again I do not think the pressure on the Gale Bladder can be in any degree considerable as it is situated in the midst of the Abdominal mass. It is therefore convenient the matter require gentle Emetics; or, if we do not succeed, let them only be given to persons who can tolerate them. — Purgatives act by stimulating the action of the Biliary ducts. It is probable that any stimulus applied to the Intestines excites the secretions that take place in them, & emanate to the rest that of the Bile. We may therefore suppose the Gallogogues of the ancients, if any, that had the power of stimulating the Intestines, may be useful; but few possess this power but such as are extremely acid; and hence, if on repeated use of them, we miss paying the Stone, we hurt the constitution. Probably the Bile is

a great Stimulus to the Intestines, & hence the want of it produces that condition so often attendant on this disease. Its hard Stools may hurt the bowels, & the belly often is very uneasy, but it ought to be kept open by purgatives. The medicine generally employed is, Castor Oil & Rhubarb.

You will find in the Historia Medica various old & new Medicines for the Jaundice, most of which have got their name for having been continued a long time & upon reason in this disease; & the disease naturally going off of itself, it was attributed to the Medicines. In short, all other Medicines, as specifics, I absolutely neglect. I have known the white & an Egg crick up as a specific, but then it must be taken for six weeks together. I believe giving upon an Intestine for the same time might be of as much service.

However I have not always been on my Guard against these Nostrums; for many years ago I was told of a sort of wormwood curing this disease, which I have tried often enough to find it of no Effect. But however it proves a Laxative, and is likewise of use in this disease in supplying the want of Bile.

Criticism upon Authors.

The practice of Physic is only to be studied on a Dogmatic or on a Theoretical footing. I shall not enter into a detail of Arguments to support this; only one or two I shall mention.

However some people may pretend, yet Theory is absolutely unavoidable; and if we begin with it, it can never be safe unless studied in a very comprehensive plan and we are much exercised in reasoning. Nothing is so ridiculous as Men reasoning on subjects where they have no data, or without a series of principles that are applicable to the particular question; for a Lawyer & Physician can to invert their studies, and reason upon the science of each other, without a competent knowledge of facts and principles, must be ridiculous and involve them in uncertainty.

In both Sciences many facts are to be required, & a series of principles to be collected previous to the study of the other profession. All men reason, but

if not probably provided with principles, and not properly exercised they are liable to great error.

There is no means of learning Physics on any Empirical plan. No Author has made the complete generalization that is necessary to his collection of every particular. Linnæus is one of the latest attempters; he sets out ~~with~~ with an attempt only to collect & compile the facts of Physics, but throughout his arrangement is very injudicious, his method of cure trifling, and his remedies are without distinction applied.

Some have attempted to make every one their own Physician, such as Libani &c. These are below criticisms. At present there are no guides but will mislead greatly. Our principal view in reading is to collect facts, but these the Dogmatists have chiefly furnished, and every one should be on his guard against implicitly receiving facts without first examining the Theory of his Author.

Every part of the Animal Economy is necessarily dependent on the other, and in the application of Theory we must detect fallacies and admit ourselves only to the very general conclusions, taking care that these are established as matters of fact.

A condition of this nature will make the most specific generalization safe.

I think there is no maxim more general than that the Nervous System or the motor powers are the parts that influence the Sensory, but here we must be cautious; our facts are too few. The principle is certain, but our progress in it is inconsiderable and we must not enter into a minute application of particulars.

If we can but distinguish how far our specifics proceed with clearness, then they can never be limited. I believe an elastic fluid to exist in the Nerves, and further that it is the Ether of Sir Isaac Newton, under peculiar manifestations; but as I do not see the application of it in practice I have omitted it.

I would require the peculiarity of appearance in Epilepsy; but as this would lead into a minute metaphysical discussion concerning the influence of Mind and Body I avoid an investigation that would necessarily be attended with subtlety. I have said in general there are states of Matter on which it depends. This condition would render a theoretical attempt safe. The extent of our reasoning will depend on our extensive collection of facts.

facts, and the reasoning from Hypothesis promotes the extension of facts. To form an Hypothesis, so far from being pernicious, considerably favours the progress of Science. An extensive induction is preferable to a short one; but the former being so tedious and unfavourable to the penetrating powers of the mind, debars us from fixing general conclusions which might be equally certain & secure from a more limited collection of particulars.

The next step for us is to acquire one system founded on the most firm & cautious general principles. It is not a matter of much anxiety what system you take up, at least of any of the modern systems. I have given you a peculiar system which you should push further, and be guided by the Paralogy, pushing that scheme of system to every particular disease.

The present age has produced three systems, of Boerhaave, Hoffman, & Stahl. These should be studied, and then Sydenham ought to be attentively perused. Sydenham is by no means Impirical; he theorizes, but he is cautious, he is content with generalities & only aims at some general conclusions as a screw for the connection of his facts.

Of these three I would advise you to begin with Boerhaave. The reason is because it is now very generally in vogue. Hoffman has few followers, & the doctrines of Stahl are daily declining. Boerhaave's Commentator, Van Swieten, has illustrated his system, and added all the new improvements since that period.

You must be cautious of the Humoral Pathology of Boerhaave; he explains most of the circumstances of the System by the fluids. Boerhaave's doctrine of Acrimony is in point of chemistry ^{is} in an imperfect state. It has received lately with respect to acrimony considerable improvements. His Acrimony and Lentor is without foundation; his Urinabilis is imaginary and hypothetical, his Speliosum pingue is also imaginary, and the whole of his pathology is erroneous. His doctrine of obstruction is also founded, but has received considerable corrections. In Inflammation, Sauvages has shown his Theory to be false: his doctrine of Derivation and Secre-
tion is refuted by Senac, and he is so intent on the fluids that he neglects the action of the solids. Van Swieten has corrected him considerably; he allows the Impetum faciens and denies in a great

great measure the viscontas fluida arteria.
 Van Swieten illustrates his opinions often from
 Hippocrates or Galen, and such illustrations are
 generally, if not supported by modern reasoning,
 superfluous, and they are manifestly forced mere-
 ly to catch or glance at a single expression to
 support an opinion.

Hoffman. His writings are more loose & dis-
 fused than Van Swieten; but he has more facts
 than the Boerhaavian system affords. A proper
 abridgement of Hoffman's large work is much
 wanted, and every one should do this as he goes a-
 long. His general views of a nervous Pathology
 are the most valuable part of his work; but we
 must take it only as general. His applications,
 when particular are confused, and he every where
 introduces a loose, vague, Chymical Theory. We
 are only to collect his facts. His reasonings on
 the Symplic system are deficient; he takes up
 the supposition that the blood moves from narrow
 into larger vessels, that is, that it moves faster &
 faster from the Heart, which is contrary to every
 Metaphysical & Mathematical Experiment. —
 Hoffman has comprehended the whole of the Symplic

system, but on a much more judicious plan. His practice however does not correspond to this, for he uses inert & feeble remedies.

Stahl. The system of Stahl is attended, in its perusal, with great difficulties, so that I recommend the writings of his disciples, Juncker, Becher, & Alberti, and last his favourite disciple. — There is much observation and many facts to be found in the *Stahlian System*; they have gone farther in generalizing these facts. Consider last's *Specimen Historia Medica*, also his *Historia morbi generalis ac status & deventale* (Quar. arum; — ac Naturae consuetudine; — ac sensibilitate Naturae; *Historia morborum habituum*; — hereditarium; — corruptelarum; — periodicarum; — incurabilium; tell you have gone a length in considering the general, you are not in a condition to study the particular practice.

The Theory of the Stahlians has two opposite faults; the *Autor* says they have extended too far; but when they put it on the single doctrine of phlogiston they put it on too narrow a footing. These doctrines of the Stahlians relate entirely to

to the Pathology & very little to the practice. They are sparing of the remedies of Bleeding, Vomiting, & Blistering; and their practice on the whole was feebler; the doctrine of the *Antropopathia* was superadded the whole of it. The Arabians deal in the weak medicines, as the Absorbents, the Boles, Animal earths & several Concreta; Diaphoretic Antimony, also Pulvis Nitrois & Essentia, Alexipharmacus, & Mistura Concreta Nervina, names which carry a pompous sound but their efficacy in disease is trifling. They believed in Amulets Incantations &c; and they have a great number of specifics; the Sargis, Jarcinus, &c.

Lind's *Medicina Clinica* has all the false Chemistry of Boerhaave & Hoffman, and has not the erudition of Boerhaave & Hoffman or Stahl, it has balked my expectations from the character of the author.

Lind's system ought to be studied; his best compiler is Ruicrius. He is not however original; he has compiled from Sennertus who is the most useful Systematic of the Galenists. The Galenists were succeeded by the Chymists, but these were men

men of rude literature, little judgement, & of strong prejudices. These were followed by the Cartesians who had more learning & were more capable of system. But they improved Physics little, except in a few peculiarities. Wallis & Woodward and Blanchard give the only accounts of the Cartesian System; the former, Wallis & Woodward, gives us the best account of the Cartesian doctrine.

The last century produced two remarkable Systems, one of Sylvius de la Boe, the other of Willis. Willis, amidst an abstruse & trifling theory, contains a great many facts. Then you may consider in Doleus's *Encyclopaedia Medica*; he first gives us the doctrines of the Galenists, then the Chemists as described by Paracelsus, then of Sylvius de la Boe, and lastly of Willis, &c. of the Helmontian & Cartesian Systems. Every one should read him as he abounds with practical observations, and at the end he gives, abstracted from his system, all that the Antients have given on the subject.

The last century produced the System of Michael Stammer, a man of extensive knowledge, of good & clear arrangement, & of comprehensive views.

views, and abounds with many observations.

The next step is to acquire particular facts scattered about & not always brought in these systems; for this you must consult the extensive list of Medical Writers; for this you may consult *Playfair's Indexes*. Two attempts have been made in the Index way, one by Moranus, published in 1660, who has disposed of all diseases in an Alphabetical order, and to any person aiming at an extensive study, it is a very necessary book. Michael Alberti, under the title of *Sententiarum Medicarum rectis*. He however is very incomplete, has considered but few authors, not so many as Moranus; he is a bigot & confined to a few views and cannot see further than his own system.

Every one should make an Index under such a title as would express the peculiarities of the case. He may make observations & arrange them afterwards. Every one doing this will find the advantage of it. There must also trust to the great collection of facts of Playfair's *Donatus*, entitled *Historia medica Maritima*. He refers indeed the marvellous to the natural.

valuable. 2. Schenkius, and 3. Bonetus in "*Medicina Septentrionalis polonica*;" his other works are compilations. These are compiled with a view to criticism. For facts, such as the de-lacked facts, you must read the papers of the Royal Society, the German Ephemerides, the Russian Bulletin, Stockholm Commentaries &c &c the French Memoirs. Add to these Astrucus. -

These are the several sources from whence you must draw the facts of Physic. Many it is true arise from partiality to Theory, particular remedies &c; but your judgement must conduct you.

After all this having enriched your judgement by facts, a constant study of Nosology is necessary. We must distinguish one disease from another or we do nothing. System & Method is over-ruled, hence without this all is a labyrinth & uncertainty; it is only as we can correct the Nosology that we have acquired proper knowledge of facts, and proper distinctions of diseases. This is a trial of the reality of the knowledge you have acquired.

The study of the Dissections of Morbid bodies is necessary, which is a source of Accuracy.

For these Bonetus, enlarged by Mongelius, is the great fund... Morgagni also, who is full of medical Tradition. Sicutaud also; he is imperfect, yet valuable.

Something further is still requisite, for further Tradition you must consult particular Writers on particular diseases.

Now is the place for the study of the Antients. I am doubtful if I should hazard my opinion respecting the antients. No ordinary physician can ~~do~~ without an acquaintance with them. The study of them is by no means to be neglected. Celsus, Galienus Aretaeus, Hippocrates &c. As to the followers of Galen, Aegineta, Trallian &c. something may be gleaned from these, but they ought chiefly to be the study of curious leisure.

I now enter on the Writers of particular diseases. In doing this I shall follow the order of my Synopsis.

Class I. Pyrexia.

For continued fevers when Inflammatory consult Sydenham.

For Intermittents consult Morton, Sydenham, Sydenham, Senac &c.

For

For Putrid fevers Huxham, Morton, Hoffman, Pringle, Lind, De Haen. The writers on Epidemics are to be consulted. There are no accurate Histories of Epidemics like Sydenham. The Morbians are good, & Witheringham. So far as they depend on sensible qualities of the air Huxham has the advantage of having seen many contagious diseases; but he has lost sight of those depending on Contagion. To these add the writers of particular climates, and those of Armies, Sails, & Hospitals, as Pringle, Morra & Lind.

In studying Epidemics you must consider

1. The rise of Contagion & production of the marsh effluvia. This is extremely extensive and has been only properly pointed out by the moderns, as by Lind & Sir John Pringle.

2. The nature of the fevers, how far bark & bleeding are proper.

3. Consider the human effluvia, an effluvia which has given rise to fatal fevers; here is a place for the prognostics of Hippocrates.

Lancisi de aëre patrium Effluvia was the first observer of Marsh Miasmata. This is pushed further by Pringle & Lind.

Malaria

Phlebotomy.

D. Barker found great agreement between Hippocrates, Sydenham & Boerhaave. There are the best agreed on & understood from Hippocrates downwards. Boerhaave is very complete & sufficient on the subject if you add to his practice the use of Bloodletting which Pringle has confirmed. With regard to the several genera of this order there are no particular writers excepting on the Arthritis; this requires a particular study & is of a distinct nature. The writers on this subject are numerous, Sydenham has only given the history of the disease. Many more also read, but with caution; others hardly deserve your attention. They have sought for a particular acrimony resembling lentor without attending to the general constitution & particular habit of Arthritics.

Erythematosa.

These must be carefully studied, especially the plague, which innumerable writers have touched. For this disease consult Dementracq, ^{the virus} J. J. J. J., Sydenham, Senac, & Chevreau; the *Truite de la peste* is Senac's tho' not under his own name; it is

a compilation of all the facts collected on the subject.

Varicella. For this disease I refer you to Sydenham. There are some corrections proposed to Sydenham's practice, as the use of the Bark, for which consult Dr. Monro Sen in the Med. Ess.; in the use also of Antiseptics, but these last are not sufficiently confirmed. — Frequent purging is a real improvement. Inoculation is the great improvement since Sydenham's time; the propriety of the practice is beyond a question, the only study is the proper conduct of it.

Miliaria. There are many German writers on this subject. I recommend to you Hoffmann. Sir David Hamilton & Dr. Fordyce have wrote on this subject, but have not improved the practice.

Hæmorrhages. The proper doctrine of these is only to be found in Hoffmann, but the Strahlmans have more fully treated the history of it. — For Hæmoptysis consult Dr. Astruc. For Hæmorrhæis consult the Strahlmans, & Alberti de Hæmorrhoidibus, Hoffmann, & Dr. Wren's Thesis.

The Menorrhagia & the uterine hæmorrhage are in a very imperfect situation in Broke. I need not

given us no lights on the last. For the more northern
is a late Italian writer, Andrews (Pasta) has
collected the whole of the doctrine but made no
material improvements respecting the practice.

Catarrh. This, so far as it is Epidemic, is
fully described by Baker. P. his treatise on the
Influenza.

Dysentery. For this consult all the histories
of the late Epidemics. Dr Zimmerman has
brought this on a steady footing, but late this is
translated, which I expect will be soon, consult
Pringle. Rudener de Morbo Macrao.

Clas II. Nervous.

Comata. Few have written on this subject, but
the judicious Welfer, vide his Historia Apoplectic
eorum. This is better however illustrated by Dis
sections. For its pathology consult Sydenham;
Boerhaave & Van Swieten are pretty full here.
Hoffman for his history should be read.

Syncope. Few writers here except Senac, who
in his Traite du Cœur is pretty complete.

Dyspepsia. There are few writers here com
plete; they have confounded it with Dyschondria
vide the ~~Dyspepsia~~ Historia. Consult Dr Heyne &
Dr

Dr Wright for these two last mentioned diseases.
You must arrange it.

Spasmi. For the Tetanus consult the London
Med. Ess: & A. Hillary. Bullinger gives little
Instruction.

Convulsion & Epilepsy. The only systematic
on this disease is Hoffman. Read Helmont &
Willis. Boerhaave & Van Swieten have compiled
the histories, but are inferior to Hoffman.

Palpitatio. See Senac. De L'is a rare disorder.

Asthma. Read Sir John Floyer, who, if you
can arrange his facts, you will find true co-
sistent nature; he refers to Van Helmont who
has many facts. A proof of this is that Van
Swieten quotes Van Helmont for facts more
than any one except Hippocrates & Galen.

Pertussis. Read Willis & Hoffman. Dr
Burton of York in his Essay on Non naturalis has
laid the foundation of the practice by introduc-
ing the Bark.

Pyrosis. No writer here. I am hindered by Lin-
naeus & Brunages.

Colica. Consult the writers on the Fevers
& Colica Pectorum. Consult Rusham, Iron Air, &c.
Hæm

Jaen, Pringle.

Cholera & Diarrhoea. No profest writer on this subject. Lambertus, a Dutch writer, has given us an account of this; but his theory is very indifferent. It has been confounded with Dysentery.

Diabetes. Haller's two Theses of Mentz, & Ambrogenslein.

Dysuria. Bagman is the only author who has kept this disease distinct from Dyspepsia & Hypochondriasis. Vide Helmont, Willis, Sydenham, & the late writers on Nervous diseases. Meppel also.

Hydrophobia. Boerhaave, Sauvages, Dessein; Consult Meusent & Crispinels lately published for the use of Spain & March in this disease.

Ursaria. No valuable writings on this. Dr Prall is trifling, & the author of the Aphorisms is so imperfect in his views that he could teach us nothing. Boerhaave & Van Swieten have collected the whole.

Uacharia. Few writers worth reading on this subject.

Marasmus. Read Haller.

Polyuria & Emphysema. For these read

a Book entitled *Pneumata Pathologica*.

Dropsy. For this disease begin with Sydenham; then read Boerhaave & Donald. Harris.

Physemia. Consult Hufsch in Sauvages' nosology; consult also Porter's Index.

Rachitis. Dr. Hufsch first treated on this subject; then Mayle, Boerhaave, Lomani & Moirne.

Scrophula. Chamaten & other French writers teach us nothing. Buford too but little; his views too confined.

Syphilis. Idem, since him little has been added.

Scorbutus. Lind has exhausted the subject. Hulme & Rapp have likewise written on it.

Elephantiasis. Consult Johannes in the

Medical Essays.

Frambæia. Consult Medical Essays.

Trichoma. Consult the Polish writers.

Icterus. Avoid Astruc & Boerhaave; his system is incorrect & imaginary; but be content with the consideration of Biliary Concretions as in the Medical Essays and in Haub's Treatise.

Labbe

Locales. Fully treated of by (Chirurgical)
writers - begin with Van Swieten & Sauvages.

(Any defect in this account may
be supplied by consulting the writers on the
history of Physic. Vander Linden, Marcellus,
Haller, & Geener's Bibliotheca. —

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